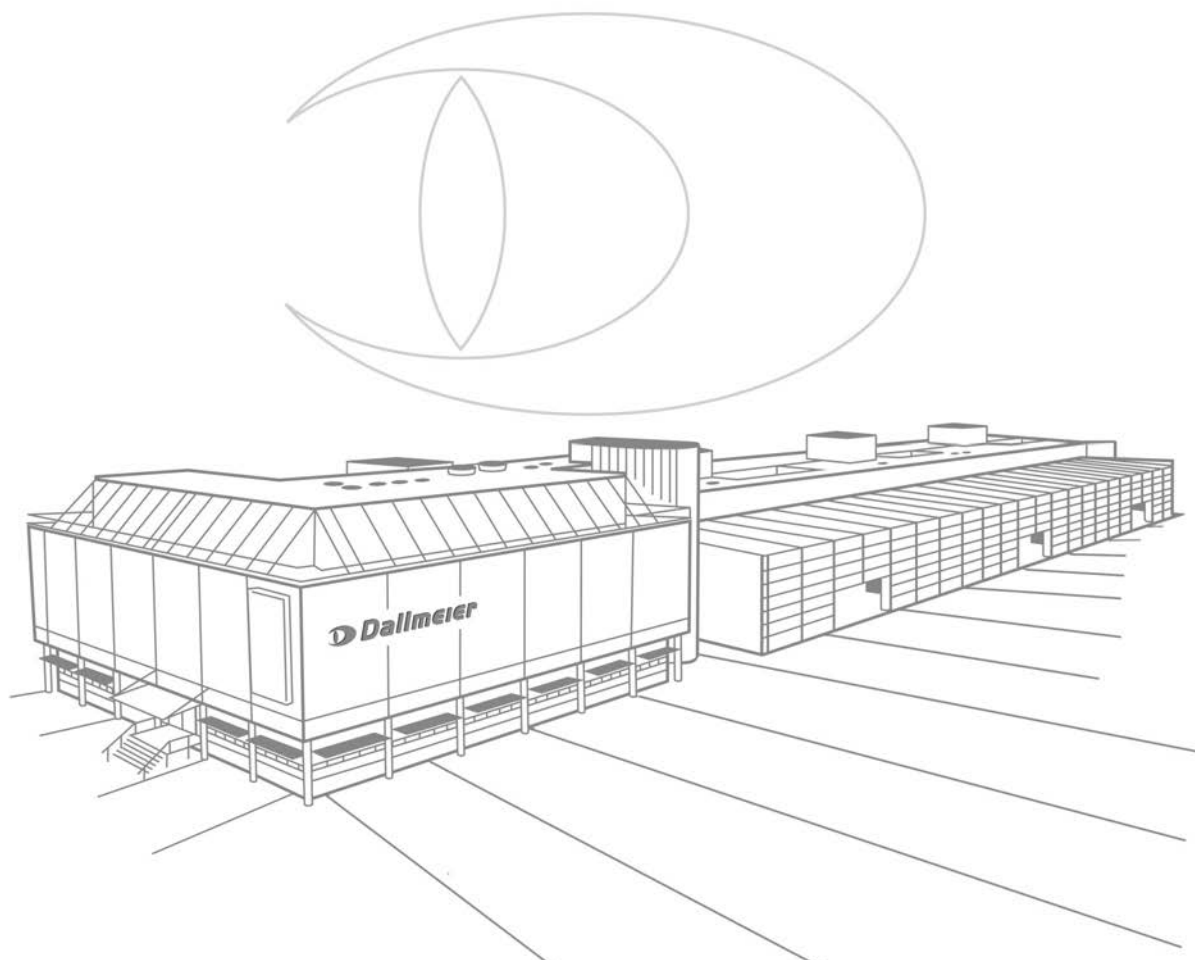


—Product Overview-2025—

Valid as of July 01, 2025
Version 1.0.0



AIRPORT



CASINO



CITY



STADIUM



LOGISTICS



PORT



INDUSTRY



RETAIL



TRAFFIC



RAILWAY

Panomera® Cameras
Domera® Cameras
PTZ Cameras
Mountera® Accessories

Domera® Accessories
Recording Systems
AI Video Analysis
Server

JBODs
Workstations
Software

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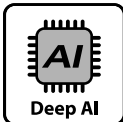
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Multifocal sensor technology
Multifocal sensor technology



Panomera® S4 Perimeter Series

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, long and narrow field of view for perimeter applications, AI Perimeter object classification, AI Perimeter App, AI Extended Tamper Detection App, Mountera® mounting system



The Panomera® S4 Perimeter is a multifocal sensor system designed to **capture the typically narrow strip along a fence** (sterile zone) and provides a total **resolution of 200 MPe** for integrated AI video analysis. This significantly reduces the infrastructure requirements. Where several megapixel cameras were previously necessary, a single Panomera® is now sufficient.

Panomera® Perimeter

The Panomera® S4 Perimeter allows the definition and capture of a **long corridor with constant width** along fences, buildings or roads and offers the **highest resolution quality with continuous depth of field** throughout the entire capture area. The Panomera® effect resulting from the optimally tuned sensors has an effective dynamic range of 130 dB and delivers a video stream with a **resolution of over 125 px/m up to a distance of 200 m**.

Panomera® Geometry

The **sensors** of the Panomera® S4 perimeter are **aligned on the right or left side** depending on the model and are arranged in a special perimeter geometry (perspective alignment). This **avoids the capture of uninteresting areas beyond the perimeter**, which is required in many cases due to **data protection**. Unlike conventional cameras, the perimeter geometry means that only a **minimal dead angle** needs to be taken into account. The **upper body of a standing person** can be captured already at a **distance of 4 m**.

Outstanding Low-Light Properties

The Panomera® S4 Perimeter is equipped with image sensors of the latest generation, which have **three times the IR light sensitivity of their predecessors**. In combination with the sophisticated image processing, they enable detailed color images even at the onset of darkness and, thanks to the outstanding infrared sensitivity, the **best results with weaker IR lighting**.

AI Perimeter Object Classification

The Panomera® is equipped with a **neural network specially trained for perimeter protection**. It reliably detects **persons with unusual body postures** (bent over, squatting, lying down) and **movement types** (very slow, very fast, crawling, creeping, rolling). The type of clothing (light, dark) is irrelevant and the net has been intensively trained to **detect people in camouflage suits** (British Smock, Camouflage Central Europe, Ghillie etc.).

AI Perimeter App

The new AI Perimeter App has been developed **specifically for the requirements of perimeter protection**. It enables the definition of **particularly protected areas (sterile zone) with pre-zones**. If relevant objects (people, vehicles, etc.) penetrate these zones, it allows the **escalation of corresponding messages** to direct the attention of the operators to the most important events.

AI Extended Tamper Detection App

The extended AI Tamper Detection App supports the **detection of tampering attempts** that are typically expected at a perimeter. In addition to the classic approaches (twisting, defocusing, spraying and covering the camera or IR illumination) the **blinding of the camera** (laser pointer, flashlight, strobe light) is also reliably detected. Furthermore, indirect manipulation by deliberately **fogging the detection area** using pyrotechnics (fog grenades, smoke pots) is detected and alerted.

Further features

- Hardened operating system Domera® OS
- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile M, Profile S and Profile T
- Weather-proof (IP69) housing with integrated heater
- Housing coating tested for seawater resistance
- Compatible with the Mountera® Quick-Lock System
- Network protocol MQTT supported

Panomera® S4 Perimeter Series

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, long and narrow field of view for perimeter applications, AI Perimeter object classification, AI Perimeter App, AI Extended Tamper Detection App, Mountera® mounting system

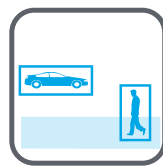
AI Perimeter Apps



The **AI Perimeter App** allows the definition of particularly protected areas (sterile zone) along a perimeter and issues an alarm message as soon as an object intrudes them. The object type relevant for the message can be defined as a person or vehicle, for example. In order to direct the operators' attention in a targeted manner, a pre-zone can be defined for each protected area, which allows the messages to be escalated. In conjunction with the neural network specially trained for perimeter protection, even attacks by well-prepared groups of perpetrators who use unusual forms of movement or camouflage clothing can be reliably alerted.

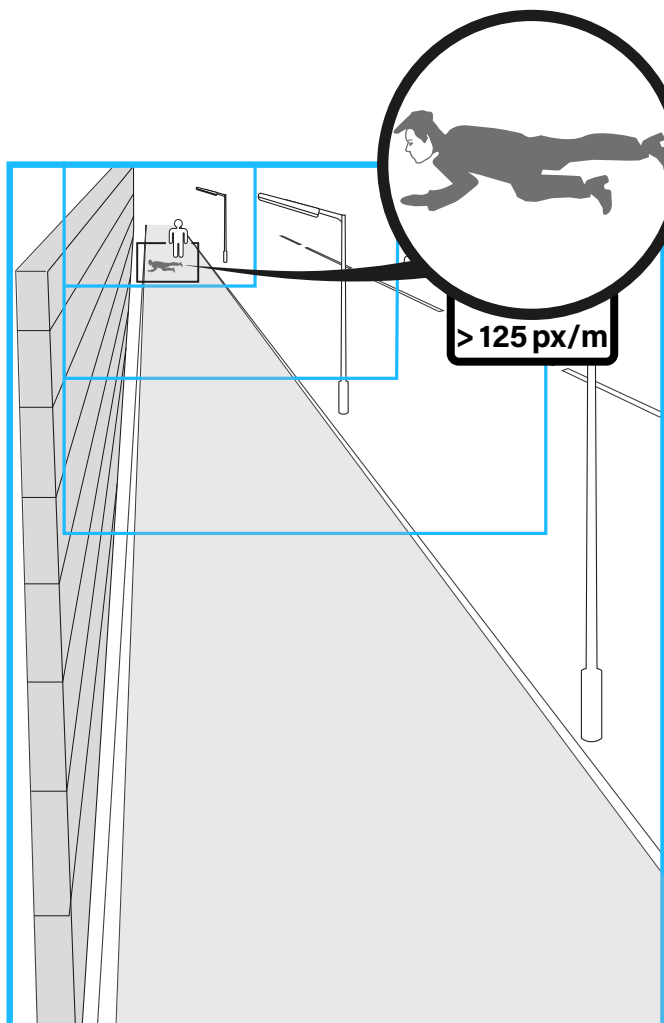


The **AI Extended Tamper Detection App** is used for detecting and reporting attempted tampering with the camera. The app detects a change in the captured scene, which typically occurs when manually rotating, defocusing, spraying and covering the camera or IR illumination, and immediately issues a corresponding message. With the special extension for perimeter protection, indirect manipulation with the aim of preventing the detection of intruders is also signaled as a corresponding message. This includes blinding the camera with powerful flashlights or laser pointers as well as deliberately fogging the detection area with pyrotechnics.

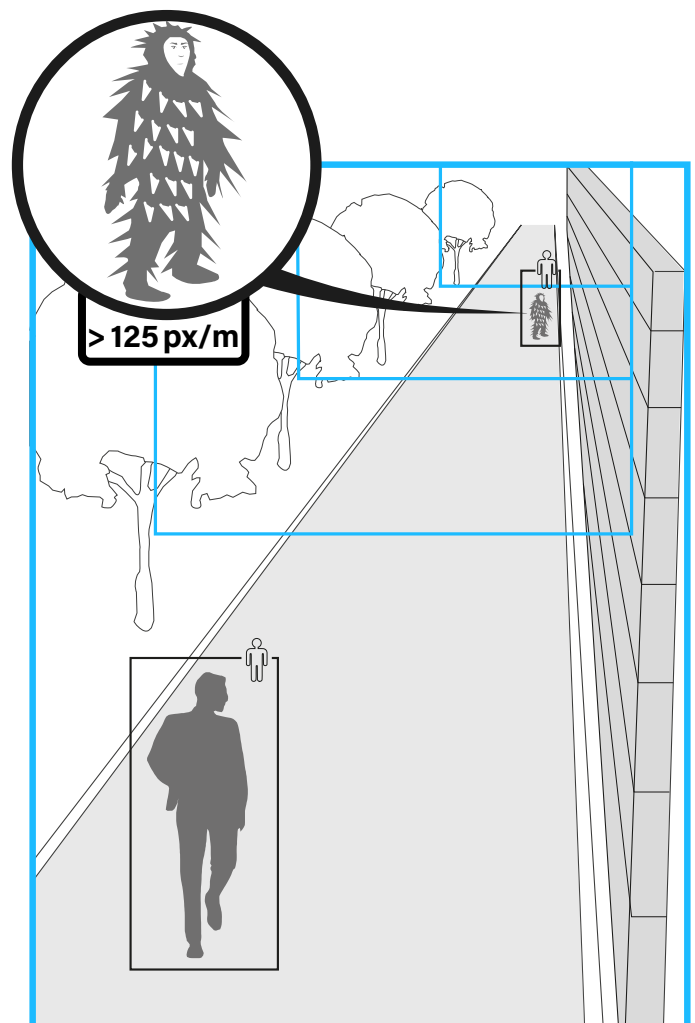


The Panomera® Perimeter also supports all other apps in the EdgeAnalytics portfolio. The **AI Line Crossing App**, for example, which issues a message as soon as an object crosses a virtual line drawn in the image. Or the **AI Loitering Detection App** for evaluating the dwell time of objects in a defined sensitive zone and the **AI Motion Detection App** for reporting motion events.

Panomera® Perimeter Field of View and Geometry



Panomera® S4 200/33 DN SL
Sensors aligned to the left



Panomera® S4 200/33 DN SR
Sensors aligned to the right

Panomera® S4 Perimeter Series

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, long and narrow field of view for perimeter applications, AI Perimeter object classification, AI Perimeter App, AI Extended Tamper Detection App, Mountera® mounting system

Panomera® Perimeter		
	009049	Panomera® S4 200/33 DN SL Multifocal sensor system, 200 MPe, 30 fps, H.265, day/night, UWDR, AI Perimeter object classification, AI Perimeter App, AI Extended Tamper Detection App, sensors and field of view aligned to the left, resolution 125 px/m up to 200 m, Mountera® mounting system
	009048	Panomera® S4 200/33 DN SR Multifocal sensor system, 200 MPe, 30 fps, H.265, day/night, UWDR, AI Perimeter object classification, AI Perimeter App, AI Extended Tamper Detection App, sensors and field of view aligned to the right, resolution 125 px/m up to 200 m, Mountera® mounting system
3D Ball Joint Upgrade Kit (recommended for even easier adjustment over long distances)		
	007901	Mountera® Ball Joint 30° 3D Adjustable Surcharge for equipping a Panomera® of the S series with the 30° plug instead of the 15° standard plug, gimbal-mounted suspension with vertical tilt up to 30°, horizontal tilt up to 15°, stepless positioning and precise adjustment with four set screws, 15°/30° sleeve included (ex works only)
Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006978	Mountera® Box with SRS Edge Mountera® Box with Dallmeier Appliance for recording up to 16 video streams, license for the recording of a Dallmeier network camera or a Panomera® system included, licenses for access from 2 clients included, power supply unit 48 V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
Sunshield		
	009252	Panomera® Sunshield Sunshield for Panomera® S 4 and S8 models with Mountera® housing, aluminium, white with black front panel
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

¹⁾ The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

Panomera® S4 Perimeter Series

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, long and narrow field of view for perimeter applications, AI Perimeter object classification, AI Perimeter App, AI Extended Tamper Detection App, Mountera® mounting system

Included Support and License Interval	
Panomera® S4 Perimeter Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months. License for the update of Domera® OS and of the neural network for the object classification with updates, upgrades and security updates ²⁾ for 60 months. License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Line Crossing App, AI Loitering Detection App and AI Motion Detection App based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene. License for the use of the VCA functions Motion Detection, Tamper Detection, Intrusion Detection, Line Crossing based on motion detection. Bring-in warranty for 24 months.	
Optional Maintenance (after the included 60 months)	
008782	Panomera® S/W 4 Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ²⁾ for 12 months. License for the update of neural networks for object classification for 12 months.
Optional Warranty	
008783	Panomera® S/W 4 Hardware Warranty (Total of 60 Months) Extension of bring-in warranty to a total of 60 months.
Panomera® Perimeter App Package (included in the Panomera® S4 Perimeter)	
009291	DLC - Panomera® S4 AI Perimeter App Package License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.



Panomera® S8 Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system



304 MP _e	192 MP _e	145 MP _e	74 MP _e
212 m >125 px/m	159 m >125 px/m	105 m >125 px/m	71 m >125 px/m
Recognition Distance	Recognition Distance	Recognition Distance	Recognition Distance

S8 304/22

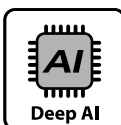
S8 192/30

S8 145/45

S8 74/90



Domera® OS



Deep AI



EdgeStorage



Mountera®



Privacy



Security



Compliant

ONVIF | M S T

The patented Panomera® Multifocal Sensor System is a completely new camera technology particularly developed for the extensive video surveillance of large scale areas. Enormous expanses and areas are captured in a completely new resolution quality in real time. This results in significantly lower infrastructure requirements. Where previously several megapixel cameras would have been necessary, a single Panomera® Multifocal Sensor System is now sufficient.

Panomera® effect

The sophisticated combination of the high-resolution sensors of Panomera® S8 Ultraline offers an excellent dynamic range of 130 dB UWDR effectively and results in an extreme Panomera® effect. It offers a resolution of more than 125 px/m up to a distance of 212, 159, 105 or 71 m, which enables the recognition of persons over the entire distance. The identification of persons (250 px/m) is supported up to a distance of 106 m depending on the model.

Domera® OS

The sensors of the Panomera® are equipped with the hardened Linux operating system Domera® OS (D-OS). In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The Panomera® is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

AI Analysis - Configuration

The embedded EdgeAnalytics AI apps are configured directly on the individual modules, with the analysis results being merged on the master module for transmission to the recording system. The master configuration will be integrated with one of the next updates of Domera® OS. This convenience feature allows cross-module configuration of the analyses on the master module and provides continuous object tracking across module boundaries.

Permanent capturing

The multifocal sensor system captures and stores all areas of the object space in maximum detail resolution. It does not matter whether the operators in live mode concentrate on a certain area (multiple detail zoom) or whether interesting areas are displayed in detail on the basis of video content analysis (multiple auto tracking). The Panomera® recordings always contain the entire action and allow for the evaluation of each incident.

Further features

- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile M, Profile S and Profile T
- Weather-proof (IP69) housing with integrated heater
- Housing coating tested for seawater resistance
- Fully compatible with the Mountera® Quick-Lock System
- Network protocol MQTT supported

Panomera® S8 Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Optional EdgeAnalytics AI Essential Apps



The **AI Motion Detection App** analyzes the entire image content and reliably detects all movements triggered by persons or vehicles. The motion events are sent to the recording system with the video stream. Afterwards, they are available with metadata such as object type, time and position for targeted evaluation with Dallmeier client software.



The **AI Tamper Detection App** is classically used for detecting and reporting attempted tampering with the camera. The app detects a general change in the captured scene, such as typically occurs when the camera is manually rotated or tilted, and immediately issues a corresponding message.



The **AI Loitering Detection App** analyzes the movement of persons detected by the neural networks and evaluates their dwell time in a defined sensitive zone. If the set limit value of the dwell time is exceeded, a corresponding message can be displayed to the operator. At the same time, undesired attendants can be requested to leave the area by outputting a stored audio sequence.



The **AI Intrusion Detection App** allows the definition of protected zones and issues a message as soon as an object intrudes into them. The object type relevant for the message can be defined as, for example, person or vehicle. For targeted operator attention, a pre-zone can be defined for each protected zone, which can be used to escalate the messages.



The **AI Line Crossing App** issues a message as soon as a person or vehicle crosses a virtual line drawn in the image. Uninteresting crossings of the virtual lines, for example by animals, can be effectively excluded. An operator is thus less distracted and can concentrate much better on relevant observations.



The **AI Vehicle Parking App** enables the definition of several zones in which vehicles may not be parked for a longer period of time. The permitted parking time can be set globally for all zones between 5 and 3600 seconds. If this time is exceeded, a corresponding message is sent to the client indicating that the vehicle has been parked incorrectly.

Optional EdgeAnalytics AI Apps



The optional **AI High Resolution Counting App** and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds (up to 4000 people or vehicles). Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.



The optional **AI Perimeter App** allows the definition of particularly protected areas (sterile zone) and issues an alarm message as soon as an object intrudes them. In conjunction with the neural network specially trained for perimeter protection, even attacks by well-prepared groups of perpetrators who use unusual forms of movement or camouflage clothing can be reliably alerted. The included **AI Extended Tamper Detection App** is used for detecting and reporting attempted tampering with the camera.

Panomera® S8 Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Panomera® S8 304/22 DN Ultraline		
	009207	Panomera® S8 304/22 DN Multifocal sensor system, 304 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 22°, resolution 125 px/m up to 212 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 192/30 DN Ultraline		
	009208	Panomera® S8 192/30 DN Multifocal sensor system, 192 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 30°, resolution 125 px/m up to 159 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 145/45 DN Ultraline		
	009209	Panomera® S8 145/45 DN Multifocal sensor system, 145 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 45°, resolution 125 px/m up to 105 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 74/90 DN Ultraline		
	009210	Panomera® S8 74/90 DN Multifocal sensor system, 74 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 90°, resolution 125 px/m up to 71 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006978	Mountera® Box with SRS Edge Mountera® Box with Dallmeier Appliance for recording up to 16 video streams, license for the recording of a Dallmeier network camera or a Panomera® system included, licenses for access from 2 clients included, power supply unit 48 V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
Sunshield		
	009252	Panomera® Sunshield Sunshield for Panomera® S 4 and S8 models with Mountera® housing, aluminium, white with black front panel
Cable Set		
	007428	Mountera® Cable Set C Preamsembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

¹⁾ The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Included Support and License Interval	
Panomera® S/W 8 Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ²⁾ for 60 months, license for the update of neural networks for object classification for 60 months, test function of the EdgeAnalytics AI Apps (Essentials) with object classification with a runtime of 30 days, unlimited license for the use of the VCA function, bring-in warranty for 24 months	
Optional Support and License Interval	
009219	AI Panomera® S/W 8 Support and License Interval Premium and Warranty (Total of 60 Months) License for the use of the support services of the Support Level Premium for 60 months, unlimited license for the use of EdgeAnalytics AI Apps (Essentials) with object classification, extension of bring-in warranty to a total of 60 months (ex factory only)
Optional Maintenance (after the included 60 months)	
008790	Panomera® S/W 8 Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ²⁾ for 12 months, license for the update of neural networks for object classification for 12 months.
Optional Warranty	
008791	Panomera® S/W 8 Hardware Warranty (Total of 60 Months) Extension of bring-in warranty to a total of 60 months
Optional Licenses	
008792	DLC - S/W 8 Panomera® EdgeAnalytics AI Apps (Essentials) License for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)
009295	DLC - Panomera® S/W 8 AI High Resolution Counting App License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 8 camera.
009337	DLC - Panomera® S8 AI Perimeter App Package License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.

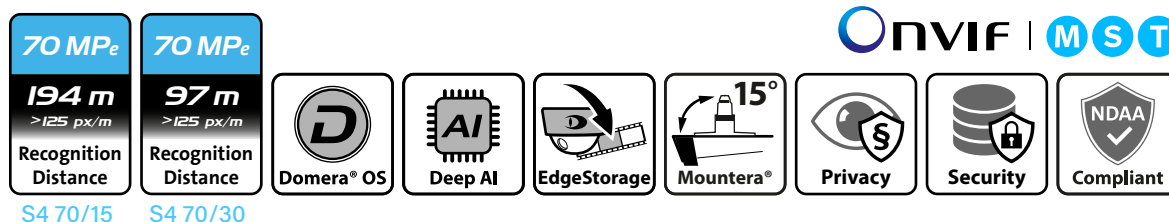
2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.



Panomera® S4 Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system



The patented Panomera® Multifocal Sensor System is a completely new camera technology particularly developed for the extensive video surveillance of large scale areas. Enormous expanses and areas are captured in a completely new resolution quality in real time. This results in significantly lower infrastructure requirements. Where previously several megapixel cameras would have been necessary, a single Panomera® Multifocal Sensor System is now sufficient.

Panomera® effect

The sophisticated combination of the high-resolution sensors of Panomera® S4 Ultraline offers an excellent dynamic range of 130 dB UWDR effectively and results in an extreme Panomera® effect. It offers a resolution of more than 125px/m up to a distance of 194 or 97 m, which enables the recognition of persons over the entire distance. The identification of persons (250 px/m) is supported up to a distance of 97 m depending on the model.

Domera®OS

The sensors of the Panomera® are equipped with the hardened Linux operating system Domera® OS (D-OS). In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The Panomera® is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

AI Analysis - Configuration

The embedded EdgeAnalytics AI apps are configured directly on the individual modules, with the analysis results being merged on the master module for transmission to the recording system. The master configuration will be integrated with one of the next updates of Domera® OS. This convenience feature allows cross-module configuration of the analyses on the master module and provides continuous object tracking across module boundaries.

Permanent capturing

The multifocal sensor system captures and stores all areas of the object space in maximum detail resolution. It does not matter whether the operators in live mode concentrate on a certain area (multiple detail zoom) or whether interesting areas are displayed in detail on the basis of video content analysis (multiple auto tracking). The Panomera® recordings always contain the entire action and allow for the evaluation of each incident.

Further features

- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile M, Profile S and Profile T
- Weather-proof (IP69) housing with integrated heater
- Housing coating tested for seawater resistance
- Fully compatible with the Mountera® Quick-Lock System
- Network protocol MQTT supported

Panomera® S4 Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Optional EdgeAnalytics AI Essential Apps



The **AI Motion Detection App** analyzes the entire image content and reliably detects all movements triggered by persons or vehicles. The motion events are sent to the recording system with the video stream. Afterwards, they are available with metadata such as object type, time and position for targeted evaluation with Dallmeier client software.



The **AI Tamper Detection App** is classically used for detecting and reporting attempted tampering with the camera. The app detects a general change in the captured scene, such as typically occurs when the camera is manually rotated or tilted, and immediately issues a corresponding message.



The **AI Loitering Detection App** analyzes the movement of persons detected by the neural networks and evaluates their dwell time in a defined sensitive zone. If the set limit value of the dwell time is exceeded, a corresponding message can be displayed to the operator. At the same time, undesired attendants can be requested to leave the area by outputting a stored audio sequence.



The **AI Intrusion Detection App** allows the definition of protected zones and issues a message as soon as an object intrudes into them. The object type relevant for the message can be defined as, for example, person or vehicle. For targeted operator attention, a pre-zone can be defined for each protected zone, which can be used to escalate the messages.



The **AI Line Crossing App** issues a message as soon as a person or vehicle crosses a virtual line drawn in the image. Uninteresting crossings of the virtual lines, for example by animals, can be effectively excluded. An operator is thus less distracted and can concentrate much better on relevant observations.



The **AI Vehicle Parking App** enables the definition of several zones in which vehicles may not be parked for a longer period of time. The permitted parking time can be set globally for all zones between 5 and 3600 seconds. If this time is exceeded, a corresponding message is sent to the client indicating that the vehicle has been parked incorrectly.

Optional EdgeAnalytics AI Apps



The optional **AI High Resolution Counting App** and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds (up to 2000 people or vehicles). Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.



The optional **AI Perimeter App** allows the definition of particularly protected areas (sterile zone) and issues an alarm message as soon as an object intrudes them. In conjunction with the neural network specially trained for perimeter protection, even attacks by well-prepared groups of perpetrators who use unusual forms of movement or camouflage clothing can be reliably alerted. The included **AI Extended Tamper Detection App** is used for detecting and reporting attempted tampering with the camera.

Panomera® S4 Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Panomera® S4 70/15 DN Ultraline		
	009205	Panomera® S4 70/15 DN Multifocal sensor system, 70 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 15°, resolution 125 px/m up to 194 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S4 70/30 DN Ultraline		
	009206	Panomera® S4 70/30 DN Multifocal sensor system, 70 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 30°, resolution 125 px/m up to 97 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006978	Mountera® Box with SRS Edge Mountera® Box with Dallmeier Appliance for recording up to 16 video streams, license for the recording of a Dallmeier network camera or a Panomera® system included, licenses for access from 2 clients included, power supply unit 48 V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
Sunshield		
	009252	Panomera® Sunshield Sunshield for Panomera® S 4 and S8 models with Mountera® housing, aluminium, white with black front panel
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

¹⁾ The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

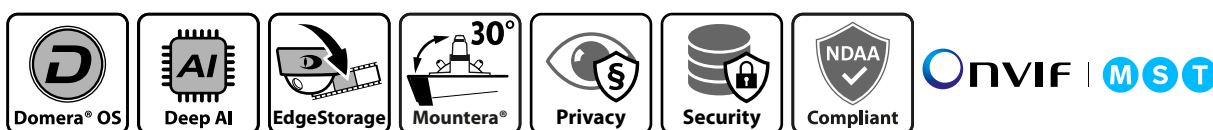
Included Support and License Interval	
Panomera® S/W 4 Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ²⁾ for 60 months, license for the update of neural networks for object classification for 60 months, test function of the EdgeAnalytics AI Apps (Essentials) with object classification with a runtime of 30 days, unlimited license for the use of the VCA function, bring-in warranty for 24 months	
Optional Support and License Interval	
009220	AI Panomera® S/W 4 Support and License Interval Premium and Warranty (Total of 60 Months) License for the use of the support services of the Support Level Premium for 60 months unlimited license for the use of EdgeAnalytics AI Apps (Essentials) with object classification extension of bring-in warranty to a total of 60 months (ex factory only)
Optional Maintenance (after the included 60 months)	
008782	Panomera® S/W 4 Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ²⁾ for 12 months, license for the update of neural networks for object classification for 12 months.
Optional Warranty	
008783	Panomera® S/W 4 Hardware Warranty (Total of 60 Months) Extension of bring-in warranty to a total of 60 months
Optional Licenses	
008784	DLC - Panomera® S/W 4 EdgeAnalytics AI Apps (Essentials) License for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)
009294	DLC - Panomera® S/W 4 AI High Resolution Counting App License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 4 camera.
009291	DLC - Panomera® S4 AI Perimeter App Package License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

Panomera® S8 Ultraline Stadium Series

MK2

Multifocal Sensor System, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system



The various models of the Panomera® Ultraline Stadium series are designed for high-resolution capture of enormous areas that start at a large distance and are spatially rather wide and short. The innovative lens-sensor concept of the Panomera® allows the acquisition of the entire capture area with a consistently high pixel density and depth of field. This makes the models of the Panomera® Ultraline Stadium series ideal for video protection of tribunes or airfields, for example.

Resolution and frame rate

The sophisticated combination of the high-resolution sensors offers an excellent dynamic range of 130 dB UWDR effectively and model-dependent a pixel density of over 125 px/m up to a distance of 325 m. When focusing on more distant areas, a pixel density above 62 px/m can also be realized up to a distance of 656 m. The Panomera® always provides images with a resolution of 66 MP in real time, forensically optimized for each sensor and without distortion in the peripheral areas.

Domera® OS

The sensors of the Panomera® are equipped with the hardened Linux operating system Domera® OS (D-OS). In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The Panomera® is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

AI Analysis - Configuration

The embedded EdgeAnalytics AI apps are configured directly on the individual modules, with the analysis results being merged on the master module for transmission to the recording system. The master configuration will be integrated with one of the next updates of Domera® OS. This convenience feature allows cross-module configuration of the analyses on the master module and provides continuous object tracking across module boundaries.

Permanent capturing

The multifocal sensor system captures and stores all areas of the object space in maximum detail resolution. It does not matter whether the operators in live mode concentrate on a certain area (multiple detail zoom) or whether interesting areas are displayed in detail on the basis of video content analysis (multiple auto tracking). The Panomera® recordings always contain the entire action and allow for the evaluation of each incident.

Further features

- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile M, Profile S and Profile T
- Weather-proof (IP69) housing with integrated heater
- Housing coating tested for seawater resistance
- Fully compatible with the Mountera® Quick-Lock System
- Network protocol MQTT supported

Panomera® S8 Ultraline Stadium Series

MK2

Multifocal Sensor System, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Optional EdgeAnalytics AI Essential Apps



The **AI Motion Detection App** analyzes the entire image content and reliably detects all movements triggered by persons or vehicles. The motion events are sent to the recording system with the video stream. Afterwards, they are available with metadata such as object type, time and position for targeted evaluation with Dallmeier client software.



The **AI Tamper Detection App** is classically used for detecting and reporting attempted tampering with the camera. The app detects a general change in the captured scene, such as typically occurs when the camera is manually rotated or tilted, and immediately issues a corresponding message.



The **AI Loitering Detection App** analyzes the movement of persons detected by the neural networks and evaluates their dwell time in a defined sensitive zone. If the set limit value of the dwell time is exceeded, a corresponding message can be displayed to the operator. At the same time, undesired attendants can be requested to leave the area by outputting a stored audio sequence.



The **AI Intrusion Detection App** allows the definition of protected zones and issues a message as soon as an object intrudes into them. The object type relevant for the message can be defined as, for example, person or vehicle. For targeted operator attention, a pre-zone can be defined for each protected zone, which can be used to escalate the messages.



The **AI Line Crossing App** issues a message as soon as a person or vehicle crosses a virtual line drawn in the image. Uninteresting crossings of the virtual lines, for example by animals, can be effectively excluded. An operator is thus less distracted and can concentrate much better on relevant observations.



The **AI Vehicle Parking App** enables the definition of several zones in which vehicles may not be parked for a longer period of time. The permitted parking time can be set globally for all zones between 5 and 3600 seconds. If this time is exceeded, a corresponding message is sent to the client indicating that the vehicle has been parked incorrectly.

Optional EdgeAnalytics AI Apps



The optional **AI High Resolution Counting App** and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds (up to 4000 people or vehicles). Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.



The optional **AI Perimeter App** allows the definition of particularly protected areas (sterile zone) and issues an alarm message as soon as an object intrudes them. In conjunction with the neural network specially trained for perimeter protection, even attacks by well-prepared groups of perpetrators who use unusual forms of movement or camouflage clothing can be reliably alerted. The included **AI Extended Tamper Detection App** is used for detecting and reporting attempted tampering with the camera.

Panomera® S8 Ultraline Stadium Series

MK2

Multifocal Sensor System, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Panomera® S8 66/13 Ultraline Stadium		
	008819	Panomera® S8 66/13 Multifocal sensor system, 66 MP, 30 fps, H.265, day, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 13°, resolution 125 px/m up to 325 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 66/20 DN Ultraline Stadium		
	008820	Panomera® S8 66/20 DN Multifocal sensor system, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 20°, resolution 125 px/m up to 211 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 66/29 DN Ultraline Stadium		
	008821	Panomera® S8 66/29 DN Multifocal sensor system, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 29°, resolution 125 px/m up to 146 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 66/30 DN Ultraline Stadium		
	008822	Panomera® S8 66/30 DN Multifocal sensor system, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 30°, resolution 125 px/m up to 211 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 66/41 DN Ultraline Stadium		
	008823	Panomera® S8 66/41 DN Multifocal sensor system, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 41°, resolution 125 px/m up to 103 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 66/45 DN Ultraline Stadium		
	008824	Panomera® S8 66/45 DN Multifocal sensor system, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 45°, resolution 125 px/m up to 140 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 66/61 DN Ultraline Stadium		
	008825	Panomera® S8 66/61 DN Multifocal sensor system, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 61°, resolution 125 px/m up to 102 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling

Panomera® S8 Ultraline Stadium Series

MK2

Multifocal Sensor System, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006978	Mountera® Box with SRS Edge Mountera® Box with Dallmeier Appliance for recording up to 16 video streams, license for the recording of a Dallmeier network camera or a Panomera® system included, licenses for access from 2 clients included, power supply unit 48 V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
Sunshield		
	009252	Panomera® Sunshield Sunshield for Panomera® S 4 and S8 models with Mountera® housing, aluminium, white with black front panel
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

¹⁾ The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

Panomera® S8 Ultraline Stadium Series



Multifocal Sensor System, 66 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Included Support and License Interval

Panomera® S/W 8 Support and License Interval Basic

License for the use of the support services of the Support Level Basic for 60 months,
license for the update of Domera® OS with updates, upgrades and security updates²⁾ for 60 months,
license for the update of neural networks for object classification for 60 months,
test function of the EdgeAnalytics AI Apps (Essentials) with object classification with a runtime of 30 days,
unlimited license for the use of the VCA function,
bring-in warranty for 24 months

Optional Support and License Interval

009219 AI Panomera® S/W 8 Support and License Interval Premium and Warranty (Total of 60 Months)

License for the use of the support services of the Support Level Premium for 60 months,
unlimited license for the use of EdgeAnalytics AI Apps (Essentials) with object classification,
extension of bring-in warranty to a total of 60 months
(ex factory only)

Optional Maintenance (after the included 60 months)

008790 Panomera® S/W 8 Software Maintenance (Plus 12 Months)

License for the update of Domera® OS with updates, upgrades and security updates²⁾ for 12 months,
license for the update of neural networks for object classification for 12 months.

Optional Warranty

008791 Panomera® S/W 8 Hardware Warranty (Total of 60 Months)

Extension of bring-in warranty to a total of 60 months

Optional Licenses

008792 DLC - S/W 8 Panomera® EdgeAnalytics AI Apps (Essentials)

License for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)

009295 DLC - Panomera® S/W 8 AI High Resolution Counting App

License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 8 camera.

009337 DLC - Panomera® S8 AI Perimeter App Package

License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

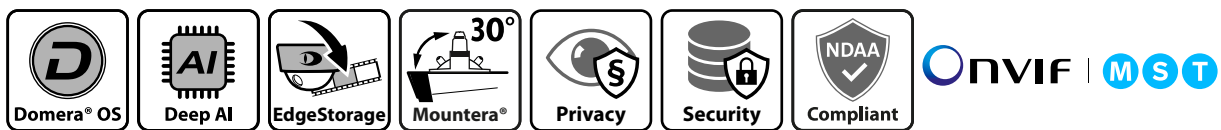
Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Panomera® S4 Ultraline Stadium Series

MK2

Multifocal Sensor System, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system



The various models of the Panomera® Ultraline Stadium series are designed for high-resolution capture of enormous areas that start at a large distance and are spatially rather wide and short. The innovative lens-sensor concept of the Panomera® allows the acquisition of the entire capture area with a consistently high pixel density and depth of field. This makes the models of the Panomera® Ultraline Stadium series ideal for video protection of tribunes or airfields, for example.

Resolution and frame rate

The sophisticated combination of the high-resolution sensors offers an excellent dynamic range of 130 dB UWDR effectively and model-dependent a pixel density of over 125 px/m up to a distance of 325 m. When focusing on more distant areas, a pixel density above 62 px/m can also be realized up to a distance of 656 m. The Panomera® always provides images with a resolution of 33 MP in real time, forensically optimized for each sensor and without distortion in the peripheral areas.

Domera® OS

The sensors of the Panomera® are equipped with the hardened Linux operating system Domera® OS (D-OS). In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The Panomera® is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

AI Analysis - Configuration

The embedded EdgeAnalytics AI apps are configured directly on the individual modules, with the analysis results being merged on the master module for transmission to the recording system. The master configuration will be integrated with one of the next updates of Domera® OS. This convenience feature allows cross-module configuration of the analyses on the master module and provides continuous object tracking across module boundaries.

Permanent capturing

The multifocal sensor system captures and stores all areas of the object space in maximum detail resolution. It does not matter whether the operators in live mode concentrate on a certain area (multiple detail zoom) or whether interesting areas are displayed in detail on the basis of video content analysis (multiple auto tracking). The Panomera® recordings always contain the entire action and allow for the evaluation of each incident.

Further features

- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile M, Profile S and Profile T
- Weather-proof (IP69) housing with integrated heater
- Housing coating tested for seawater resistance
- Fully compatible with the Mountera® Quick-Lock System
- Network protocol MQTT supported

Panomera® S4 Ultraline Stadium Series

MK2

Multifocal Sensor System, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Optional EdgeAnalytics AI Essential Apps



The **AI Motion Detection App** analyzes the entire image content and reliably detects all movements triggered by persons or vehicles. The motion events are sent to the recording system with the video stream. Afterwards, they are available with metadata such as object type, time and position for targeted evaluation with Dallmeier client software.



The **AI Tamper Detection App** is classically used for detecting and reporting attempted tampering with the camera. The app detects a general change in the captured scene, such as typically occurs when the camera is manually rotated or tilted, and immediately issues a corresponding message.



The **AI Loitering Detection App** analyzes the movement of persons detected by the neural networks and evaluates their dwell time in a defined sensitive zone. If the set limit value of the dwell time is exceeded, a corresponding message can be displayed to the operator. At the same time, undesired attendants can be requested to leave the area by outputting a stored audio sequence.



The **AI Intrusion Detection App** allows the definition of protected zones and issues a message as soon as an object intrudes into them. The object type relevant for the message can be defined as, for example, person or vehicle. For targeted operator attention, a pre-zone can be defined for each protected zone, which can be used to escalate the messages.



The **AI Line Crossing App** issues a message as soon as a person or vehicle crosses a virtual line drawn in the image. Uninteresting crossings of the virtual lines, for example by animals, can be effectively excluded. An operator is thus less distracted and can concentrate much better on relevant observations.



The **AI Vehicle Parking App** enables the definition of several zones in which vehicles may not be parked for a longer period of time. The permitted parking time can be set globally for all zones between 5 and 3600 seconds. If this time is exceeded, a corresponding message is sent to the client indicating that the vehicle has been parked incorrectly.

Optional EdgeAnalytics AI Apps



The optional **AI High Resolution Counting App** and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds (up to 2000 people or vehicles). Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.



The optional **AI Perimeter App** allows the definition of particularly protected areas (sterile zone) and issues an alarm message as soon as an object intrudes them. In conjunction with the neural network specially trained for perimeter protection, even attacks by well-prepared groups of perpetrators who use unusual forms of movement or camouflage clothing can be reliably alerted. The included **AI Extended Tamper Detection App** is used for detecting and reporting attempted tampering with the camera.

Panomera® S4 Ultraline Stadium Series

MK2

Multifocal Sensor System, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Panomera® S4 33/12 Ultraline Stadium		
	008812	Panomera® S4 33/12 Multifocal sensor system, 33 MP, 30 fps, H.265, day, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 12°, resolution 125 px/m up to 325 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S4 33/13 DN Ultraline Stadium		
	008813	Panomera® S4 33/13 DN Multifocal sensor system, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 13°, resolution 125 px/m up to 211 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S4 33/19 DN Ultraline Stadium		
	008814	Panomera® S4 33/19 DN Multifocal sensor system, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 19°, resolution 125 px/m up to 140 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S4 33/20 DN Ultraline Stadium		
	008815	Panomera® S4 33/20 DN Multifocal sensor system, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 20°, resolution 125 px/m up to 211 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S4 33/27 DN Ultraline Stadium		
	008816	Panomera® S4 33/27 DN Multifocal sensor system, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 27°, resolution 125 px/m up to 102 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S4 33/29 DN Ultraline Stadium		
	008817	Panomera® S4 33/29 DN Multifocal sensor system, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 29°, resolution 125 px/m up to 146 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S4 33/41 DN Ultraline Stadium		
	008818	Panomera® S4 33/41 DN Multifocal sensor system, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 41°, resolution 125 px/m up to 103 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling

Panomera® S4 Ultraline Stadium Series

MK2

Multifocal Sensor System, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006978	Mountera® Box with SRS Edge Mountera® Box with Dallmeier Appliance for recording up to 16 video streams, license for the recording of a Dallmeier network camera or a Panomera® system included, licenses for access from 2 clients included, power supply unit 48 V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
Sunshield		
	009252	Panomera® Sunshield Sunshield for Panomera® S 4 and S8 models with Mountera® housing, aluminium, white with black front panel
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

1) The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.



Panomera® S4 Ultraline Stadium Series



Multifocal Sensor System, 33 MP, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Included Support and License Interval

Panomera® S/W 4 Support and License Interval Basic

License for the use of the support services of the Support Level Basic for 60 months,
license for the update of Domera® OS with updates, upgrades and security updates²⁾ for 60 months,
license for the update of neural networks for object classification for 60 months,
test function of the EdgeAnalytics AI Apps (Essentials) with object classification with a runtime of 30 days,
unlimited license for the use of the VCA function,
bring-in warranty for 24 months

Optional Support and License Interval

009220 AI Panomera® S/W 4 Support and License Interval Premium and Warranty (Total of 60 Months)

License for the use of the support services of the Support Level Premium for 60 months
unlimited license for the use of EdgeAnalytics AI Apps (Essentials) with object classification
extension of bring-in warranty to a total of 60 months
(ex factory only)

Optional Maintenance (after the included 60 months)

008782 Panomera® S/W 4 Software Maintenance (Plus 12 Months)

License for the update of Domera® OS with updates, upgrades and security updates²⁾ for 12 months,
license for the update of neural networks for object classification for 12 months.

Optional Warranty

008783 Panomera® S/W 4 Hardware Warranty (Total of 60 Months)

Extension of bring-in warranty to a total of 60 months

Optional Licenses

008784 DLC - Panomera® S/W 4 EdgeAnalytics AI Apps (Essentials)

License for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)

009294 DLC - Panomera® S/W 4 AI High Resolution Counting App

License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 4 camera.

009291 DLC - Panomera® S4 AI Perimeter App Package

License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.

²⁾ Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

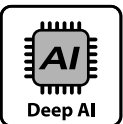
Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Panomera® S8 Ultraline Runway Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, combined horizontal field of view 156°
AI/VCA Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system



ONVIF | M S T

The Panomera® multifocal sensor systems of the Runway series are designed for the high-resolution capture of very wide areas that start at a medium to larger distance and are spatially rather short. The extreme horizontal field of view results from the combination of two Panomera® systems, making the Runway solution ideal for the protection of takeoff and touchdown fields.

Panomera® effect

The sophisticated combination of the high-resolution sensors of the two Panomera® S8 Ultraline offers an excellent dynamic range of 130 dB UWDR effective and results in an outstanding Panomera® effect with an effective resolution of 380 megapixels (MPe). In combination with an extreme horizontal field of view of 156°, this allows very wide areas to be captured with high pixel density and consistent depth of field.

Domera® OS

The sensors of the Panomera® are equipped with the hardened Linux operating system Domera® OS (D-OS). In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The Panomera® is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

AI Analysis - Configuration

The embedded EdgeAnalytics AI apps are configured directly on the individual modules, with the analysis results being merged on the master module for transmission to the recording system. The master configuration will be integrated with one of the next updates of Domera® OS. This convenience feature allows cross-module configuration of the analyses on the master module and provides continuous object tracking across module boundaries.

Permanent capturing

The multifocal sensor system captures and stores all areas of the object space in maximum detail resolution. It does not matter whether the operators in live mode concentrate on a certain area (multiple detail zoom) or whether interesting areas are displayed in detail on the basis of video content analysis (multiple auto tracking). The Panomera® recordings always contain the entire action and allow for the evaluation of each incident.

Further features

- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile M, Profile S and Profile T
- Weather-proof (IP69) housing with integrated heater
- Housing coating tested for seawater resistance
- Fully compatible with the Mountera® Quick-Lock System
- Network protocol MQTT supported

Panomera® S8 Ultraline Runway Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, combined horizontal field of view 156°
AI/VCA Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Panomera® S8 190/78 DN L Ultraline Runway		
	008840	Panomera® S8 190/78 DN L Multifocal sensor system, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 78°, version for the capture of the left side, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® S8 190/78 DN R Ultraline Runway		
	008841	Panomera® S8 190/78 DN R Multifocal sensor system, 190 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 78°, version for the capture of the right side, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006978	Mountera® Box with SRS Edge Mountera® Box with Dallmeier Appliance for recording up to 16 video streams, license for the recording of a Dallmeier network camera or a Panomera® system included, licenses for access from 2 clients included, power supply unit 48 V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
Sunshield		
	009252	Panomera® Sunshield Sunshield for Panomera® S 4 and S8 models with Mountera® housing, aluminium, white with black front panel
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

¹⁾ The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

Panomera® S8 Ultraline Runway Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, combined horizontal field of view 156°
AI/VCA Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Included Support and License Interval	
Panomera® S/W 8 Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ²⁾ for 60 months, license for the update of neural networks for object classification for 60 months, test function of the EdgeAnalytics AI Apps (Essentials) with object classification with a runtime of 30 days, unlimited license for the use of the VCA function, bring-in warranty for 24 months	
Optional Support and License Interval	
009219	AI Panomera® S/W 8 Support and License Interval Premium and Warranty (Total of 60 Months) License for the use of the support services of the Support Level Premium for 60 months, unlimited license for the use of EdgeAnalytics AI Apps (Essentials) with object classification, extension of bring-in warranty to a total of 60 months (ex factory only)
Optional Maintenance (after the included 60 months)	
008790	Panomera® S/W 8 Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ²⁾ for 12 months, license for the update of neural networks for object classification for 12 months.
Optional Warranty	
008791	Panomera® S/W 8 Hardware Warranty (Total of 60 Months) Extension of bring-in warranty to a total of 60 months
Optional Analytic	
008792	DLC - S/W 8 Panomera® EdgeAnalytics AI Apps (Essentials) License for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)
009295	DLC - Panomera® S/W 8 AI High Resolution Counting App License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 8 camera.

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

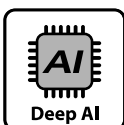
Panomera® W Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, field of view horizontal 180°/360° and vertical 90°, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system



95 MP_e 9 m >250 px/m Identification Distance	95 MP_e 17 m >125 px/m Recognition Distance	95 MP_e 34 m >62 px/m Observation Distance
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The patented Panomera® Multifocal Sensor System is a completely new camera technology particularly developed for the extensive video surveillance of large scale areas. Enormous expanses and areas are captured in a completely new resolution quality in real time. This results in significantly lower infrastructure requirements. Where previously several megapixel cameras would have been necessary, a single Panomera® Multifocal Sensor System is now sufficient.

Panomera® effect

The Panomera® 360° Multifocal Sensor System has been designed with a focus on securing large rooms from a single location. The innovative combination of high-resolution sensors offers an outstanding dynamic range of 130 dB UWDR effectively and allows the unique recording of a complete half-space (half-sphere) in real time. This offers a resolution of more than 125 px/m up to a distance of 17 m, making it possible to recognize people on an area of 929 sqm.

Domera® OS

The sensors of the Panomera® are equipped with the hardened Linux operating system Domera® OS (D-OS). In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The Panomera® is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

AI Analysis - Configuration

The embedded EdgeAnalytics AI apps are configured directly on the individual modules, with the analysis results being merged on the master module for transmission to the recording system. The master configuration will be integrated with one of the next updates of Domera® OS. This convenience feature allows cross-module configuration of the analyses on the master module and provides continuous object tracking across module boundaries.

Permanent capturing

The multifocal sensor system captures and stores all areas of the object space in maximum detail resolution. It does not matter whether the operators in live mode concentrate on a certain area (multiple detail zoom) or whether interesting areas are displayed in detail on the basis of video content analysis (multiple auto tracking). The Panomera® recordings always contain the entire action and allow for the evaluation of each incident.

Further features

- Dewarped display with Dallmeier client software supported
- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile M, Profile S and Profile T
- Weather-proof (IP69) housing with integrated heater
- Housing coating tested for seawater resistance
- Fully compatible with the Mountera® Quick-Lock System
- Network protocol MQTT supported

Panomera® W Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, field of view horizontal 180°/360° and vertical 90°, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Optional EdgeAnalytics AI Essential Apps



The **AI Motion Detection App** analyzes the entire image content and reliably detects all movements triggered by persons or vehicles. The motion events are sent to the recording system with the video stream. Afterwards, they are available with metadata such as object type, time and position for targeted evaluation with Dallmeier client software.



The **AI Tamper Detection App** is classically used for detecting and reporting attempted tampering with the camera. The app detects a general change in the captured scene, such as typically occurs when the camera is manually rotated or tilted, and immediately issues a corresponding message.



The **AI Loitering Detection App** analyzes the movement of persons detected by the neural networks and evaluates their dwell time in a defined sensitive zone. If the set limit value of the dwell time is exceeded, a corresponding message can be displayed to the operator. At the same time, undesired attendants can be requested to leave the area by outputting a stored audio sequence.



The **AI Intrusion Detection App** allows the definition of protected zones and issues a message as soon as an object intrudes into them. The object type relevant for the message can be defined as, for example, person or vehicle. For targeted operator attention, a pre-zone can be defined for each protected zone, which can be used to escalate the messages.



The **AI Line Crossing App** issues a message as soon as a person or vehicle crosses a virtual line drawn in the image. Uninteresting crossings of the virtual lines, for example by animals, can be effectively excluded. An operator is thus less distracted and can concentrate much better on relevant observations.



The **AI Vehicle Parking App** enables the definition of several zones in which vehicles may not be parked for a longer period of time. The permitted parking time can be set globally for all zones between 5 and 3600 seconds. If this time is exceeded, a corresponding message is sent to the client indicating that the vehicle has been parked incorrectly.

Optional EdgeAnalytics AI Apps



The optional **AI High Resolution Counting App** and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds (up to 2000 (W4) and 4000 (W8) people or vehicles). Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.

Panomera® W Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, field of view horizontal 180°/360° and vertical 90°, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Panomera® W8		
	008804	Panomera® W8 95/360 DN Multifocal sensor system, 95 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 360° and vertical 90°, resolution 125 px/m up to 17 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Panomera® W4		
	008805	Panomera® W4 45/180 DN Multifocal sensor system, 45 MPe, 30 fps, H.265, day/night, UWDR, Deep AI object classification, EdgeAnalytics AI Apps, field of view horizontal 180° and vertical 90°, resolution 125 px/m up to 17 m, Mountera® mounting system, 1000BASE-T Ethernet port for copper cabling
Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006978	Mountera® Box with SRS Edge Mountera® Box with Dallmeier Appliance for recording up to 16 video streams, license for the recording of a Dallmeier network camera or a Panomera® system included, licenses for access from 2 clients included, power supply unit 48 V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
Adapter		
	007536	Mountera® In-Ceiling Adapter W 4/8 Mountera® adapter for the installation of a Panomera® W 4/8 in suspended ceilings, robust steel construction, black
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

¹⁾ The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

Panomera® W Ultraline Area Series

MK2

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, field of view horizontal 180°/360° and vertical 90°, Deep AI object classification, EdgeAnalytics AI Apps, variable Mountera® mounting system

Included Support and License Interval

Panomera® S/W 8 Support and License Interval Basic

License for the use of the support services of the Support Level Basic for 60 months,
license for the update of Domera® OS with updates, upgrades and security updates²⁾ for 60 months,
license for the update of neural networks for object classification for 60 months,
test function of the EdgeAnalytics AI Apps (Essentials) with object classification with a runtime of 30 days,
unlimited license for the use of the VCA function,
bring-in warranty for 24 months

Panomera® S/W 4 Support and License Interval Basic

License for the use of the support services of the Support Level Basic for 60 months,
license for the update of Domera® OS with updates, upgrades and security updates²⁾ for 60 months,
license for the update of neural networks for object classification for 60 months,
test function of the EdgeAnalytics AI Apps (Essentials) with object classification with a runtime of 30 days,
unlimited license for the use of the VCA function,
bring-in warranty for 24 months

Optional Support and License Interval

009219 AI Panomera® S/W 8 Support and License Interval Premium and Warranty (Total of 60 Months)

License for the use of the support services of the Support Level Premium for 60 months,
unlimited license for the use of EdgeAnalytics AI Apps (Essentials) with object classification,
extension of bring-in warranty to a total of 60 months
(ex factory only)

009220 AI Panomera® S/W 4 Support and License Interval Premium and Warranty (Total of 60 Months)

License for the use of the support services of the Support Level Premium for 60 months
unlimited license for the use of EdgeAnalytics AI Apps (Essentials) with object classification
extension of bring-in warranty to a total of 60 months
(ex factory only)

Optional Maintenance (after the included 60 months)

008790 Panomera® S/W 8 Software Maintenance (Plus 12 Months)

License for the update of Domera® OS with updates, upgrades and security updates²⁾ for 12 months,
license for the update of neural networks for object classification for 12 months.

008782 Panomera® S/W 4 Software Maintenance (Plus 12 Months)

License for the update of Domera® OS with updates, upgrades and security updates²⁾ for 12 months,
license for the update of neural networks for object classification for 12 months.

Optional Warranty

008791 Panomera® S/W 8 Hardware Warranty (Total of 60 Months)

Extension of bring-in warranty to a total of 60 months

008783 Panomera® S/W 4 Hardware Warranty (Total of 60 Months)

Extension of bring-in warranty to a total of 60 months

Optional Analytic

008784 DLC - Panomera® S/W 4 EdgeAnalytics AI Apps (Essentials)

License for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)

009294 DLC - Panomera® S/W 4 AI High Resolution Counting App

License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 4 camera.

008792 DLC - S/W 8 Panomera® EdgeAnalytics AI Apps (Essentials)

License for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)

009295 DLC - Panomera® S/W 8 AI High Resolution Counting App

License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 8 camera.

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

Panomera® Privacy Shield

Remote controlled shield for simple, cost-effective and recognizable deactivation of image acquisition on a Panomera® S 4/8 with Mountera® Quick-Lock System



The Panomera® Privacy Shield has been specially developed for the simple, cost-effective and clearly recognizable deactivation of image acquisition on the latest Panomera® S 4 and 8 models.

Areas of Application

The use of the Panomera® Privacy Shield is recommended if the regulations of the GDPR or the right of assembly require the deactivation of image acquisition. This can be the case in urban areas, for example, if the monitored area is to be used temporarily for events or demonstrations.

System

The Panomera® Privacy Shield is integrated between the front glass and the lens sensor units of the Panomera® System. As soon as the aperture is lowered, image acquisition is mechanically prevented and clearly indicated to the outside by a well recognizable signal color.

Remote control

The Panomera® Privacy Shield is fully integrated into the Panomera® system and can be completely and independently remote controlled over the network using the system's graphical user interface. This allows an immediate and easy use of the Privacy Shield. Additional system components or separate cabling are not required.

Efficiency

The Panomera® Privacy Shield can be used at any time and for a precisely defined period of time. Unwanted downtimes due to lengthy and cost-intensive measures directly at the installation site are completely eliminated. The deactivation of image acquisition can be tailored exactly to the duration of an event.

Maintenance

The Panomera® Privacy Shield is designed for temporary use according to the GDPR. When used over a longer period of time, color changes may typically occur. This natural wear and tear depends on the intensity of the sunlight at the place of use. In general, Dallmeier recommends replacing the Privacy Shield after a use of approx. 1000 hours in order to maintain the full effect of the signal color¹⁾.

1) The light fastness corresponds to level 4 according to ISO 105-B02:2014.

Panomera® Privacy Shield

Remote controlled shield for simple, cost-effective and recognizable deactivation of image acquisition on a Panomera® S 4/8 with Mountera® Quick-Lock System

Upgrade Kit		
	007900	Panomera® Privacy Shield Upgrade kit for a Panomera® S 4/8 with Mountera® Quick-Lock system, remote controlled shield for mechanical deactivation of image acquisition, only ex works (not available for all models, delivery time on request)



Panomera® Air Blast Charger 4

Compressed air system for wiperless and remote controlled cleaning of the front glass of up to four Panomera® S 4/8 with Mountera® Quick-Lock System



The innovative **Panomera® Air Blast System** is designed for easy, reliable and cost-effective maintenance of the latest **Panomera® S 4 and 8 models**. The compressed air nozzles in the front frames are optimally matched to the front glass and allow gentle cleaning with a concentrated blast of compressed air.

Connection

The **Panomera® Air Blast Charger 4** allows the connection of up to four Panomera® S 4/8 over one compressed air line each of up to 10 m length. The compressed air line is offered with a length of 25 m or 50 m and can be quickly and easily shortened to the required length.

Configuration

The video streams of the connected Panomera® S 4/8 systems are stored together on a Dallmeier recording system that allows to configure the Ethernet I/O interface of the **Panomera® Air Blast Charger 4** in order to control the relevant compressed air lines. Note that the recording system must be equipped with the license **DLC - Ethernet I/O Interface**.

Control

The **Panomera® Air Blast Charger 4** is remotely controlled with **Dallmeier client software** via the network and the corresponding Dallmeier recording system with minimal effort. The compressed air blast is triggered with a few clicks, while the status of the cleaning (triggered, running, finished) can be displayed in an info window.

Compressed air

The **Panomera® Air Blast Charger 4** is equipped with a pressure tank which can be filled with approximately 8 bar compressed air in about one minute. After cleaning a Panomera® with a blast of compressed air, the system is ready for use again in the shortest time, allowing all connected Panomera® systems to be cleaned in just a few minutes.

Cleaning

The innovative **Panomera® Air Blast System** generates a targeted compressed air blast which reliably removes water droplets, dust, flying sand or spider webs from the front glass. Unlike conventional systems with wipers, no mechanical wear has to be considered. In addition, the risk of mechanical damage to the glass surface is basically eliminated. Apart from the cyclical safety inspection, no further measures are thus required at the installation site of the Panomera® systems.

Requirements

- Dallmeier recording system with Ethernet I/O license
- Dallmeier client software

Scope of delivery

- Panomera® Air Blast Charger 4
- Bracket for mounting on walls

Options

- Bracket for mounting on poles
- Compressed air line 25 m or 50 m
- Panomera® Air Blast Kit

Panomera® Air Blast Charger 4

Compressed air system for wiperless and remote controlled cleaning of the front glass of up to four Panomera® S 4/8 with Mountera® Quick-Lock System

System		
	007896	Panomera® Air Blast Charger 4 Supply system for compressed air for cleaning of the front glass of up to four Panomera® S 4/8 with Mountera® Quick-Lock System, compressed air line optional, compressed air approx. 8 bar, vandal-resistant, powder-coated, grey
Pole Mount Bracket		
	008239	Panomera® ABC Pole Adapter Adapter for mounting the Panomera® Air Blast Charger 4 on round (Ø 40 - 170 mm) or rectangular (□ 50 - 150 mm) poles, 2x profile rails (sheet steel), 2x tensioning straps (stainless steel), galvanized
Compressed Air Line		
	008237	Panomera® ABC Compressed Air Line 25 m Compressed air line for connecting a Panomera® S 4/8 with Air Blast Kit to a Panomera® Air Blast Charger 4, polyethylene, UV-resistant and flexible, black, length 25 m
	008238	Panomera® ABC Compressed Air Line 50 m Compressed air line for connecting a Panomera® S 4/8 with Air Blast Kit to a Panomera® Air Blast Charger 4, polyethylene, UV-resistant and flexible, black, length 50 m
Upgrade Kit		
	007899	Panomera® Air Blast Kit Upgrade kit for a Panomera® S 4/8 with Mountera® Quick-Lock System for cleaning the front glass with compressed air, compressed air line with length 3 m for connection to a Panomera® Air Blast Charger 4 included



Notes

[illegible]



Camera Series RDF6000DN

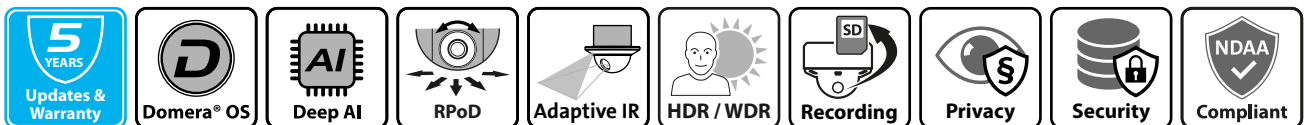
DOMERA®

High definition camera, 4/8 MP, H.265, day/night, WDR/HDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, motor-driven varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system



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The cameras of the RDF6000DN series are designed for applications that require real-time, high-resolution images during the day and, depending on the model, in IR mode at night. The different models are offered with a resolution of 4 or 8 MP and an integrated lens in a vandal-resistant dome housing.

Domera® OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The camera is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. On the other hand, the various counting apps cyclically determine the number of persons or vehicles in a defined area and report when a set threshold value is exceeded. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

Remote Positioning Dome

The camera is equipped with a motor-driven gimbal for precise lens alignment over the network (RPoD / PTRZ). Remote control is provided by the Domera® OS user interface and allows for simple installation and easy adjustment of the captured scene if requirements change. In addition, Domera® OS supports the adjustment of zoom, focus and iris of the P-Iris lens over the network. After installation and commissioning of the camera, no further measures are required on site.

Adaptive IR Illumination

The homogeneous illumination of the IR models is discreetly integrated under the permeable housing cover and can be manually or automatically adapted to the captured scene. Orientation and intensity of the illumination are dynamically determined by the position of the lens and the exposure control. In this way, disturbing side effects such as reflections from white walls next to the detection area can be avoided as far as possible.

EdgeRecording

The camera allows parallel recording of two video streams (including audio and analysis data) with different settings on an integrated SD card (optional). Local recording is triggered by the EdgeAnalytics event with the option to set a pre- and post-recording time. Additionally, the first video stream can be transferred to a recording system for permanent recording as usual.

Further features

- Video compression H.264, H.265, MJPEG
- Dynamic range WDR/HDR supported
- EdgeStorage (buffer) or EdgeRecording (two tracks)
- Ambient light sensor and removable IR cut filter
- Automatic switching of presets for day and night
- Position sensor for automatic orientation (wall, ceiling)
- Automatic corridor mode supported
- GDPR-compliant functions for data protection and security
- In-ceiling housing UL 2043 "plenum rated" compliant
- Compatible with ONVIF Profile G, M, S and T
- Network protocol MQTT supported

Camera Series RDF6000DN

DOMERA®

High definition camera, 4/8 MP, H.265, day/night, WDR/HDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, motor-driven varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system

Included EdgeAnalytics AI Essential Apps



The **AI Motion Detection App** analyzes the entire image content and reliably detects all movements triggered by persons or vehicles. The motion events are sent to the recording system with the video stream. Afterwards, they are available with metadata such as object type, time and position for targeted evaluation with Dallmeier client software.



The **AI Tamper Detection App** is classically used for detecting and reporting attempted tampering with the camera. The app detects a general change in the captured scene, such as typically occurs when the camera is manually rotated or tilted, and immediately issues a corresponding message.



The **AI Loitering Detection App** analyzes the movement of persons detected by the neural networks and evaluates their dwell time in a defined sensitive zone. If the set limit value of the dwell time is exceeded, a corresponding message can be displayed to the operator. At the same time, undesired attendants can be requested to leave the area by outputting a stored audio sequence.



The **AI Intrusion Detection App** allows the definition of protected zones and issues a message as soon as an object intrudes into them. The object type relevant for the message can be defined as, for example, person or vehicle. For targeted operator attention, a pre-zone can be defined for each protected zone, which can be used to escalate the messages.



The **AI Line Crossing App** issues a message as soon as a person or vehicle crosses a virtual line drawn in the image. Uninteresting crossings of the virtual lines, for example by animals, can be effectively excluded. An operator is thus less distracted and can concentrate much better on relevant observations.



The **AI People Counting App** analyzes the entire image content in a defined cycle and determines the number of people present in defined areas. Irrelevant objects are effectively filtered out by object classification based on a neural network to achieve the most accurate count result possible. In addition, a message can be output when a set threshold value is exceeded.



The **AI Vehicle Counting App** allows the subdivision of large scenes into different zones and cyclically determines the number of objects. Based on an accurate object classification using a neural network, the number of vehicles present is output immediately. In addition, a message can be output when a set threshold value is exceeded.



The **AI Vehicle Parking App** enables the definition of several zones in which vehicles may not be parked for a longer period of time. The permitted parking time can be set globally for all zones between 5 and 3600 seconds. If this time is exceeded, a corresponding message is sent to the client indicating that the vehicle has been parked incorrectly.

Optional EdgeAnalytics AI Apps



The optional **AI High Resolution Counting App** and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds (up to 500 people or vehicles). Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.



The optional **AI Perimeter App** allows the definition of particularly protected areas (sterile zone) and issues an alarm message as soon as an object intrudes them. In conjunction with the neural network specially trained for perimeter protection, even attacks by well-prepared groups of perpetrators who use unusual forms of movement or camouflage clothing can be reliably alerted. The included **AI Extended Tamper Detection App** is used for detecting and reporting attempted tampering with the camera.

Camera Series RDF6000DN

DOMERA®

High definition camera, 4/8 MP, H.265, day/night, WDR/HDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, motor-driven varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system

Series 6400		
	008297.401	RDF6400DN High definition camera, 4 MP, H.265, day/night, Deep AI/VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.3 / 4,5 – 9,7 mm
	008297.402	RDF6400DN High definition camera, 4 MP, H.265, day/night, Deep AI/VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.8 / 12 – 40 mm
Series 6800		
	008298.401	RDF6800DN Ultra high definition camera, 8 MP, H.265, day/night, Deep AI/VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.3 / 4,5 – 9,7 mm
	008298.402	RDF6800DN Ultra high definition camera, 8 MP, H.265, day/night, Deep AI/VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.8 / 12 – 40 mm
Illumination (series RDF6000DN and RDF5000DN, SDF6800DN)		
	008406	Domera® Dual Matrix LED Ring Illumination for Domera® in-ceiling housing, five IR LEDs and five white light LEDs, event-controlled switching between IR and white light illumination, individual control of the intensity of individual LEDs or automatic adjustment to the captured scene, microphone included, recommended for models with 4.5 – 9.7 mm or fisheye lens (only ex factory)
Housing cover		
	008408	Domera® Housing Cover Vandalproof LED Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, with cut-outs for IR and white light LEDs ²⁾
	008529	Domera® Housing Cover Vandalproof Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, cannot be combined with cameras with Domera® Dual Matrix LED Ring
	008410	Domera® Housing Cover Vandalproof White Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, white, cannot be combined with cameras with Domera® Dual Matrix LED Ring
Sunshield		
	009253	Domera® Sunshield Sunshield with housing cover for Domera® dome housings, five cut-outs for IR and white light LEDs, aluminium, black

1) Installation without tool, IR transmission 70%, white light transmission 10%, reflection-free at tilt from 25° to 90°
2) Installation with tool, IR transmission 100%, white light transmission 100%, reflection-free at tilt from 0° to 90°

Camera Series RDF6000DN



High definition camera, 4/8 MP, H.265, day/night, WDR/HDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, motor-driven varifocal lens, motorized 3-axis adjustment (RPOD), variable Domera® mounting system

Adapter		
	008407	Domera® Surface Mount Adapter Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, polycarbonate, white
	009177	Domera® Surface Mount Adapter Vandalproof Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, aluminum, white
	008209	Domera® Wall Bracket Multifunctional bracket for mounting a Domera® in-ceiling housing on a wall or pole, compatible with the Mountera® Vandalproof Pole Adapter and the Mountera® Box, safety rope included, aluminum, white
	008508	Domera® Wall Bracket with Speaker Multifunctional bracket for mounting a Domera® in-ceiling housing on a wall or pole, compatible with the Mountera® Vandalproof Pole Adapter and the Mountera® Box, Domera® Speaker with connection cable and NF amplifier 1.4 W included, recommended for use as intercom system, safety rope included, aluminum, white
Extensions		
	008421	Domera® Breakout Cable Breakout cable with 1x Audio Line IN, 1x Audio Line OUT, 2x Contact IN, 2x Contact OUT, 1x power supply
	008423	Domera® Passive Heating Kit Fan based heating by using the waste heat of the electronic components (approx. 6 W) to prevent fogging on the inside of the dome, manual remote control via Domera® OS user interface ³⁾ (ex factory only)
Memory Extensions		
	008275	SD Card microSDHC 32 GB SD card microSDHC 32 GB for the memory extension of cameras, App Performance Class 1 (A1)
	008276	SD Card microSDHC 64 GB SD card microSDHC 64 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009318	SD Card microSDHC 128 GB SD card microSDHC 128 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009319	SD Card microSDHC 256 GB SD card microSDHC 256 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009160	SD Card microSDHC 512 GB SD card microSDHC 512 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009103	SD Card microSDHC 1TB SD card microSDHC 1TB for the memory extension of cameras, App Performance Class 1 (A1)
Power supply		
	004316	PoE Midspan 30 W Midspan power supply unit, 1x Ethernet port, 10/100/1000Base-T, 802.3at, 802.3af, 30 W

3) When the fan is active, the audio signal of the microphone may be superimposed.



Camera Series RDF6000DN



High definition camera, 4/8 MP, H.265, day/night, WDR/HDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, motor-driven varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system

Included licenses and Warranty	
DLC - Camera Support Level Premium License for the use of the support services of the Support Level Premium for 60 months	
DLC - Camera Software Update License for the update of Domera® OS with bug fixes, feature updates, feature upgrades and security updates ⁴⁾ for 60 months License for the update of the neural network for object classification for 60 months	
DLC - EdgeAnalytics AI Essential Apps Unlimited license for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI People Counting, AI Vehicle Counting, AI Vehicle Parking) based on the neural network for object classification (person, animal ⁵⁾ , car, large vehicle, two-wheeler)	
DLC - VCA Functions Unlimited license for the use of the VCA function (VCA Motion Detection, VCA Tamper Detection, VCA Intrusion Detection, VCA Line Crossing) based on motion detection	
Camera Hardware Warranty Extended bring-in warranty of 60 months in total	
Optional Maintenance (after the included 60 months)	
008416	Camera Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ⁴⁾ for 12 months License for the update of the neural network for object classification for 12 months
Optional Licenses	
008419	DLC - Audio IN/OUT and Intercom License for the use of the Audio Line IN/OUT interface, audio compression G.711 or AAC or Opus, recommended for use as intercom system (additional hardware required)
009293	DLC - Domera® AI High Resolution Counting App License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Domera® camera.
009336	DLC - Domera® AI Perimeter App Package License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.

4) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

5) If the lens is oriented vertically downwards, the object class "animal" is not available because the neural network is not yet trained for animal recognition from above.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SDF6800DN

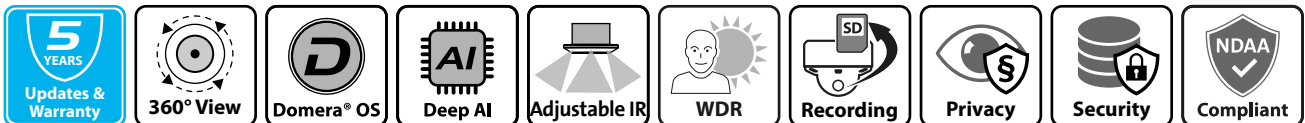
DOMERA®

Ultra high definition camera, 8 MP, H.265, day/night, WDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, fisheye lens, 360° panoramic view, motorized fine alignment, variable Domera® mounting system



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The SDF6800DN is a network camera with a fisheye lens specifically designed for the image sensor, allowing it to capture a complete half-space with a 360° panoramic view. It is offered with a resolution of 8 MP in a vandal-resistant dome housing.

Domera®OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

AI Analysis - Deep AI Object Classification

The camera is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

AI Analysis - EdgeAnalytics Apps

The embedded EdgeAnalytics AI apps use the raw data of the Deep AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. On the other hand, the various counting apps cyclically determine the number of persons or vehicles in a defined area and report when a set threshold value is exceeded. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

Motorized Fine Alignment

The camera is equipped with a motor-driven mechanism for precise fine alignment of the image sensor over the network. Remote control is performed via the Domera® OS user interface and allows easy adjustment of the horizontal axis to the captured scene.

Adjustable IR Illumination

The homogeneous illumination of the IR models is discreetly integrated under the permeable housing cover and can be individually adjusted to the captured scene. The illumination intensity of the five semi-discrete high-power LEDs can be adjusted individually and independently of each other. This means that disruptive side effects, such as reflections from white walls next to the detection area, can be avoided as far as possible.

EdgeRecording

The camera allows parallel recording of two video streams (including audio and analysis data) with different settings on an integrated SD card (optional). Local recording is triggered by the EdgeAnalytics event with the option to set a pre- and post-recording time. Additionally, the first video stream can be transferred to a recording system for permanent recording as usual.

Further features

- Field of view 360° horizontally and 90° vertically
- Video compression H.264, H.265, MJPEG
- Dynamic range WDR/HDR supported
- EdgeStorage (buffer) or EdgeRecording (two tracks)
- Ambient light sensor and removable IR cut filter
- Automatic switching of presets for day and night
- Position sensor for automatic orientation (wall, ceiling)
- GDPR-compliant functions for data protection and security
- In-ceiling housing UL 2043 "plenum rated" compliant
- Compatible with ONVIF Profile G, M, S and T
- Network protocol MQTT supported

Ultra high definition camera, 8 MP, H.265, day/night, WDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, fisheye lens, 360° panoramic view, motorized fine alignment, variable Domera® mounting system

Included EdgeAnalytics AI Essential Apps



The **AI Motion Detection App** analyzes the entire image content and reliably detects all movements triggered by persons or vehicles. The motion events are sent to the recording system with the video stream. Afterwards, they are available with metadata such as object type, time and position for targeted evaluation with Dallmeier client software.



The **AI Tamper Detection App** is classically used for detecting and reporting attempted tampering with the camera. The app detects a general change in the captured scene, such as typically occurs when the camera is manually rotated or tilted, and immediately issues a corresponding message.



The **AI Loitering Detection App** analyzes the movement of persons detected by the neural networks and evaluates their dwell time in a defined sensitive zone. If the set limit value of the dwell time is exceeded, a corresponding message can be displayed to the operator. At the same time, undesired attendants can be requested to leave the area by outputting a stored audio sequence.



The **AI Intrusion Detection App** allows the definition of protected zones and issues a message as soon as an object intrudes into them. The object type relevant for the message can be defined as, for example, person or vehicle. For targeted operator attention, a pre-zone can be defined for each protected zone, which can be used to escalate the messages.



The **AI Line Crossing App** issues a message as soon as a person or vehicle crosses a virtual line drawn in the image. Uninteresting crossings of the virtual lines, for example by animals, can be effectively excluded. An operator is thus less distracted and can concentrate much better on relevant observations.



The **AI People Counting App** analyzes the entire image content in a defined cycle and determines the number of people present in defined areas. Irrelevant objects are effectively filtered out by object classification based on a neural network to achieve the most accurate count result possible. In addition, a message can be output when a set threshold value is exceeded.



The **AI Vehicle Counting App** allows the subdivision of large scenes into different zones and cyclically determines the number of objects. Based on an accurate object classification using a neural network, the number of vehicles present is output immediately. In addition, a message can be output when a set threshold value is exceeded.

Ultra high definition camera, 8 MP, H.265, day/night, WDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, fisheye lens, 360° panoramic view, motorized fine alignment, variable Domera® mounting system

Camera		
	008355	SDF6800DN Ultra high definition camera, 8 MP, H.265, day/night, Deep AI/VCA, WDR, PoE, Domera® in-ceiling housing, design cover black IR translucent ¹⁾ , fisheye lens F2.8 / 1.6 mm
Illumination (series RDF6000DN and RDF5000DN, SDF6800DN)		
	008406	Domera® Dual Matrix LED Ring Illumination for Domera® in-ceiling housing, five IR LEDs and five white light LEDs, event-controlled switching between IR and white light illumination, individual control of the intensity of individual LEDs or automatic adjustment to the captured scene, microphone included, recommended for models with 4.5 - 9.7 mm or fisheye lens (only ex factory)
Housing cover		
	008529	Domera® Housing Cover Vandalproof Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, cannot be combined with cameras with Domera® Dual Matrix LED Ring
	008410	Domera® Housing Cover Vandalproof White Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, white, cannot be combined with cameras with Domera® Dual Matrix LED Ring
Adapter		
	008407	Domera® Surface Mount Adapter Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, polycarbonate, white
	009177	Domera® Surface Mount Adapter Vandalproof Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, aluminum, white
	008209	Domera® Wall Bracket Multifunctional bracket for mounting a Domera® in-ceiling housing on a wall or pole, compatible with the Mountera® Vandalproof Pole Adapter and the Mountera® Box, safety rope included, aluminum, white
Extensions		
	008421	Domera® Breakout Cable Breakout cable with 1x Audio Line IN, 1x Audio Line OUT, 2x Contact IN, 2x Contact OUT, 1x power supply
	008976	Domera® SDF Internal Audio OUT Upgrade Extension of a Domera® SDF series camera with a 1.4 W AF amplifier for audio output via the integrated speaker, recommended for use as an intercom system (retrofitting not possible, only ex works) ²⁾

1) Installation without tool, IR transmission 70%, white light transmission 10%

2) Audio output via integrated speaker not supported in conjunction with Domera® Breakout Cable

Ultra high definition camera, 8 MP, H.265, day/night, WDR, PoE, Deep AI object classification, EdgeAnalytics AI Apps, fisheye lens, 360° panoramic view, motorized fine alignment, variable Domera® mounting system

Memory Extensions		
	008275	SD Card microSDHC 32 GB SD card microSDHC 32 GB for the memory extension of cameras, App Performance Class 1 (A1)
	008276	SD Card microSDHC 64 GB SD card microSDHC 64 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009318	SD Card microSDHC 128 GB SD card microSDHC 128 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009319	SD Card microSDHC 256 GB SD card microSDHC 256 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009160	SD Card microSDHC 512 GB SD card microSDHC 512 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009103	SD Card microSDHC 1TB SD card microSDHC 1TB for the memory extension of cameras, App Performance Class 1 (A1)
Power supply		
	004316	PoE Midspan 30 W Midspan power supply unit, 1x Ethernet port, 10/100/1000Base-T, 802.3at, 802.3af, 30 W
Included licenses and Warranty		
DLC - Camera Support Level Premium License for the use of the support services of the Support Level Premium for 60 months		
DLC - Camera Software Update License for the update of Domera® OS with bug fixes, feature updates, feature upgrades and security updates ³⁾ for 60 months License for the update of the neural network for object classification for 60 months		
DLC - EdgeAnalytics AI Essential Apps Unlimited license for the use of EdgeAnalytics AI Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI People Counting, AI Vehicle Counting) based on the neural network for object classification (person, animal, car, large vehicle, two-wheeler)		
DLC - VCA Functions Unlimited license for the use of the VCA function (VCA Motion Detection, VCA Tamper Detection, VCA Intrusion Detection, VCA Line Crossing) based on motion detection		
Camera Hardware Warranty Extended bring-in warranty of 60 months in total		
Optional Maintenance (after the included 60 months)		
008416	Camera Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ³⁾ for 12 months License for the update of the neural network for object classification for 12 months	
Optional License		
008419	DLC - Audio IN/OUT and Intercom License for the use of the Audio Line IN/OUT interface, audio compression G.711, AAC or Opus, recommended for use as intercom system (additional hardware required)	

³⁾ Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

Camera Series RDF5000DN

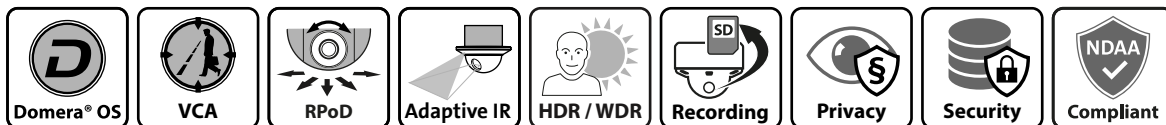
DOMERA®

High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system



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The cameras of the RDF5000DN series offer an economical balance of highest resolution and light sensitivity. Their image sensor has very good light sensitivity and delivers detailed color images even in low light conditions. The combination of the most advanced encoder technology and the sophisticated image processing results in real-time recordings with high resolution at excellent contrast, brilliant clarity and highest color fidelity.

Domera® OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

Video Content Analysis

The integrated Video Content Analysis (VCA) detects movements and objects in the uncompressed image and analyzes them in real-time (depending on the analysis resolution) with highly developed analysis functions such as Intrusion Detection or Line Crossing. The detected events can be used to trigger the recording of a Dallmeier recording system. Together with the detected objects and the corresponding metadata, they are stored in a database. This allows the targeted search and evaluation of the recordings with Dallmeier Client software.

Wide Dynamic Range

The camera offers a WDR function (also known as High Dynamic Range (HDR)) for optimal recording of scenes with very bright and dark areas. Each image is captured with two special settings that are combined in real time to create a balanced result. The resulting video stream offers much more detail in both light and dark areas and is visually very close to the human eye's perception.

Remote Positioning Dome

The camera is equipped with a motor-driven gimbal for precise lens alignment over the network (RPoD / PTRZ). Remote control is provided by the Domera® OS user interface and allows for simple installation and easy adjustment of the captured scene if requirements change. In addition, Domera® OS supports the adjustment of zoom, focus and iris of the P-Iris lens over the network. After installation and commissioning of the camera, no further measures are required on site.

Adaptive IR Illumination

The homogeneous illumination of the IR models is discreetly integrated under the permeable housing cover and can be manually or automatically adapted to the captured scene. Orientation and intensity of the illumination are dynamically determined by the position of the lens and the exposure control. In this way, disturbing side effects such as reflections from white walls next to the detection area can be avoided as far as possible.

EdgeRecording

The camera allows parallel recording of two video streams (including VCA analysis data) with different settings on an integrated SD card (optional). Local recording is triggered by VCA events with the option of setting a pre- and post-recording time. Additionally, the first video stream can be transferred to a recording system for permanent recording as usual.

Further features

- Video compression H.264, H.265, MJPEG
- Dynamic range WDR/HDR supported
- EdgeStorage (buffer) or EdgeRecording (two tracks)
- Ambient light sensor and removable IR cut filter
- Automatic switching of presets for day and night
- Position sensor for automatic orientation (wall, ceiling)
- Automatic corridor mode supported
- GDPR-compliant functions for data protection and security
- In-ceiling housing UL 2043 "plenum rated" compliant
- Compatible with ONVIF Profile S and Profile T
- Network protocol MQTT supported

Camera Series RDF5000DN

DOMERA®

High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system

Series 5120		
	008526.401	RDF5120DN High definition camera, 2 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.4 / 3 – 10 mm
	008526.402	RDF5120DN High definition camera, 2 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.8 / 12 – 40 mm
Series 5140		
	008527.401	RDF5140DN High definition camera, 5 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.4 / 3 – 10 mm
	008527.402	RDF5140DN High definition camera, 5 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® RPoD in-ceiling housing, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.8 / 12 – 40 mm
Illumination (series RDF6000DN and RDF5000DN, SDF6800DN)		
	008406	Domera® Dual Matrix LED Ring Illumination for Domera® in-ceiling housing, five IR LEDs and five white light LEDs, event-controlled switching between IR and white light illumination, individual control of the intensity of individual LEDs or automatic adjustment to the captured scene, microphone included, recommended for models with 4.5 – 9.7 mm or fisheye lens (only ex factory)
Housing cover		
	008408	Domera® Housing Cover Vandalproof LED Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, with cut-outs for IR and white light LEDs ²⁾
	008529	Domera® Housing Cover Vandalproof Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, cannot be combined with cameras with Domera® Dual Matrix LED Ring
	008410	Domera® Housing Cover Vandalproof White Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, white, cannot be combined with cameras with Domera® Dual Matrix LED Ring
Sunshield		
	009253	Domera® Sunshield Sunshield with housing cover for Domera® dome housings, five cut-outs for IR and white light LEDs, aluminium, black

1) Installation without tool, IR transmission 70%, white light transmission 10%, reflection-free at tilt from 25° to 90°

2) Installation with tool, IR transmission 100%, white light transmission 100%, reflection-free at tilt from 0° to 90°

Camera Series RDF5000DN

DOMERA®

High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPOD), variable Domera® mounting system

Adapter		
	008407	Domera® Surface Mount Adapter Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, polycarbonate, white
	009177	Domera® Surface Mount Adapter Vandalproof Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, aluminum, white
	008209	Domera® Wall Bracket Multifunctional bracket for mounting a Domera® in-ceiling housing on a wall or pole, compatible with the Mountera® Vandalproof Pole Adapter and the Mountera® Box, safety rope included, aluminum, white
Extensions		
	008421	Domera® Breakout Cable Breakout cable with 1x Audio IN ³⁾ , 1x Audio OUT ³⁾ , 2x Contact IN, 2x Contact OUT, 1x power supply
	008423	Domera® Passive Heating Kit Fan based heating by using the waste heat of the electronic components (approx. 6W) to prevent fogging on the inside of the dome, manual remote control via Domera® OS user interface (ex factory only)
Memory Extensions		
	008275	SD Card microSDHC 32 GB SD card microSDHC 32 GB for the memory extension of cameras, App Performance Class 1 (A1)
	008276	SD Card microSDHC 64 GB SD card microSDHC 64 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009318	SD Card microSDHC 128 GB SD card microSDHC 128 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009319	SD Card microSDHC 256 GB SD card microSDHC 256 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009160	SD Card microSDHC 512 GB SD card microSDHC 512 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009103	SD Card microSDHC 1TB SD card microSDHC 1TB for the memory extension of cameras, App Performance Class 1 (A1)
Power supply		
	004316	PoE Midspan 30 W Midspan power supply unit, 1x Ethernet port, 10/100/1000Base-T, 802.3at, 802.3af, 30 W

3) The Audio I/O function is not supported by the RDF5000 series cameras.

High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system

Included Support and License Interval	
Camera Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ⁴⁾ for 60 months, unlimited license for the use of the VCA function based on motion detection, bring-in warranty for 24 months	
Optional Maintenance (after the included 60 months)	
008416	Camera Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ⁴⁾ for 12 months
Optional Warranty	
008417	Camera Hardware Warranty (Total of 60 Months) Extension of bring-in warranty to a total of 60 months

4) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

Camera Series RDF5000DN

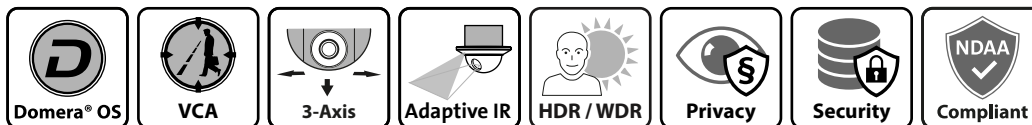
High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system

DOMERA®

Version E



reddot winner 2022



The cameras of the RDF5000DN series offer an economical balance of highest resolution and light sensitivity. Their image sensor has very good light sensitivity and delivers detailed color images even in low light conditions. The combination of the most advanced encoder technology and the sophisticated image processing results in real-time recordings with high resolution at excellent contrast, brilliant clarity and highest color fidelity.

Domera® OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

Video Content Analysis

The integrated Video Content Analysis (VCA) detects movements and objects in the uncompressed image and analyzes them in real-time (depending on the analysis resolution) with highly developed analysis functions such as Intrusion Detection or Line Crossing. The detected events can be used to trigger the recording of a Dallmeier recording system. Together with the detected objects and the corresponding metadata, they are stored in a database. This allows the targeted search and evaluation of the recordings with Dallmeier Client software.

Wide Dynamic Range

The camera offers a WDR function (also known as High Dynamic Range (HDR)) for optimal recording of scenes with very bright and dark areas. Each image is captured with two special settings that are combined in real time to create a balanced result. The resulting video stream offers much more detail in both light and dark areas and is visually very close to the human eye's perception.

Remote Positioning Dome

The camera is equipped with a motor-driven three-axis adjustment for precise alignment of the lens over the network (RPoD). Remote control is provided by the Domera® OS user interface and allows for simple installation and easy adjustment of the captured scene if requirements change. In addition, Domera® OS supports the adjustment of zoom, focus and iris of the P-Iris lens over the network. After installation and commissioning of the camera, no further measures are required on site.

Adaptive IR Illumination

The homogeneous 180° illumination of the IR models is discreetly integrated under the permeable housing cover and can be manually or automatically adapted to the captured scene. Orientation and intensity of the illumination are dynamically determined by the position of the lens and the exposure control. In this way, disturbing side effects such as reflections from white walls next to the detection area can be avoided as far as possible.

EdgeRecording

The camera allows the recording of a video stream (encoder 2, including VCA analysis data) on an integrated SD card (optional). Local recording is triggered by VCA events with the option of setting a pre- and post-recording time. Additionally, the first video stream can be transferred to a recording system for permanent recording as usual.

Further features

- Video compression H.264, H.265, MJPEG
- Dynamic range WDR/HDR supported
- Ambient light sensor and removable IR cut filter
- Automatic switching of presets for day and night
- GDPR-compliant functions for data protection and security
- In-ceiling housing UL 2043 "plenum rated" compliant
- Compatible with ONVIF Profile S

Camera Series RDF5000DN

High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPOD), variable Domera® mounting system

DOMERA®

Version E

Series 5120 Version E		
	008678.401	RDF5120DN (E) High definition camera, 2 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® in-ceiling housing with motor-driven three-axis adjustment, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.4 / 3 – 10 mm
	008678.402	RDF5120DN (E) High definition camera, 2 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® in-ceiling housing with motor-driven three-axis adjustment, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.8 / 12 – 40 mm
Series 5140 Version E		
	008679.401	RDF5140DN (E) High definition camera, 5 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® in-ceiling housing with motor-driven three-axis adjustment, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.4 / 3 – 10 mm
	008679.402	RDF5140DN (E) High definition camera, 5 MP, H.265, day/night, VCA, WDR/HDR, PoE, Domera® in-ceiling housing with motor-driven three-axis adjustment, design cover black IR translucent ¹⁾ , motor-driven varifocal lens F1.8 / 12 – 40 mm
Illumination (series RDF5000DN version E)		
	008680	Domera® IR LED Stripe Illumination for Domera® in-ceiling housing, three IR LEDs with 180° in total, individual control of the intensity of individual LEDs or automatic adjustment to the captured scene, for RDF5000DN version E, recommended for models with 3 – 10 mm lens, optimized for horizontal mounting of the camera (in-ceiling, surface, wall mount) ²⁾ (ex factory only)
Housing cover		
	008408	Domera® Housing Cover Vandalproof LED Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, with cut-outs for IR and white light LEDs ³⁾
	008529	Domera® Housing Cover Vandalproof Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, cannot be combined with cameras with Domera® Dual Matrix LED Ring
	008410	Domera® Housing Cover Vandalproof White Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, white, cannot be combined with cameras with Domera® Dual Matrix LED Ring
Sunshield		
	009253	Domera® Sunshield Sunshield with housing cover for Domera® dome housings, five cut-outs for IR and white light LEDs, aluminium, black ⁴⁾

1) Installation without tool, IR transmission 70%, white light transmission 10%, reflection-free at tilt from 25° to 90°

2) When mounted vertically on walls, shadowing occurs in the lower image area due to the design.

3) Installation with tool, IR transmission 100%, white light transmission 100%, reflection-free at tilt from 0° to 90°

4) In combination with the Domera® IR LED Stripe mounted above the sunshade, IR shading at close range must be taken into account.

Camera Series RDF5000DN

High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPOD), variable Domera® mounting system

DOMERA®

Version E

Adapter		
	008407	Domera® Surface Mount Adapter Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, polycarbonate, white
	009177	Domera® Surface Mount Adapter Vandalproof Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, aluminum, white
	008209	Domera® Wall Bracket Multifunctional bracket for mounting a Domera® in-ceiling housing on a wall or pole, compatible with the Mountera® Vandalproof Pole Adapter and the Mountera® Box, safety rope included, aluminum, white
Extensions		
	008421	Domera® Breakout Cable Breakout cable with 1x Audio Line IN ⁵⁾ , 1x Audio Line OUT ⁵⁾ , 2x Contact IN, 2x Contact OUT, 1x power supply
	008423	Domera® Passive Heating Kit Fan based heating by using the waste heat of the electronic components (approx. 6W) to prevent fogging on the inside of the dome, manual remote control via Domera® OS user interface (ex factory only)
Memory Extensions		
	008275	SD Card microSDHC 32 GB SD card microSDHC 32 GB for the memory extension of cameras, App Performance Class 1 (A1)
	008276	SD Card microSDHC 64 GB SD card microSDHC 64 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009318	SD Card microSDHC 128 GB SD card microSDHC 128 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009319	SD Card microSDHC 256 GB SD card microSDHC 256 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009160	SD Card microSDHC 512 GB SD card microSDHC 512 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009103	SD Card microSDHC 1TB SD card microSDHC 1TB for the memory extension of cameras, App Performance Class 1 (A1)
Power supply		
	004316	PoE Midspan 30 W Midspan power supply unit, 1x Ethernet port, 10/100/1000Base-T, 802.3at, 802.3af, 30 W

5) The Audio I/O function is not supported by the RDF5000 series cameras.

Camera Series RDF5000DN

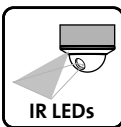
High definition camera, 2/5 MP, H.265, day/night, VCA, WDR/HDR, PoE, varifocal lens, motorized 3-axis adjustment (RPoD), variable Domera® mounting system



Included Support and License Interval	
Camera Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ⁶⁾ for 60 months, unlimited license for the use of the VCA function based on motion detection, bring-in warranty for 24 months	
Optional Maintenance (after the included 60 months)	
008416	Camera Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ⁶⁾ for 12 months
Optional Analytics Package (Push Service for SeMSy® Mobile Client)	
008681	DLC - Analytic Package for RDF5000 E-Version License for the use of the Rule Handler function (day/night filter, logical connection) and support of the Push service for SeMSy® Mobile Client as well as for the message dispatch via MQTT and the URL call via HTTP with a camera of the RDF5000 (E) series
Optional Streaming Package (Access, Streaming and Event Service for SeMSy® Mobile Client)	
008682	DLC - Streaming Package for RDF5000 E-Version License for the use of Encoder 2 for EdgeRecording and support of the services Access, Streaming and Event for SeMSy® Mobile Client as well as for the Multicast Streaming function (static, dynamic, RTSP) with a camera of the RDF5000 (E) series

6) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

High Definition Camera, 5 MP, H.265, day/night, WDR/HDR, PoE, Basic AI EdgeAnalytics optional, integrated IR illumination, compact surface mount dome housing



The cameras of the DDF6050DN series are designed for applications that require real-time, high-resolution images during the day and in IR mode at night. Installed in a compact surface-mounted housing, they can be mounted on ceilings or walls in the tightest of spaces and operated via PoE.

Domera® OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

Basic AI Object Classification (optional)

The camera is equipped with an intensively trained neural network that analyzes the captured images in high resolution and independent of movements in the background (green spaces, water areas, etc.) and reliably classifies defined objects (persons, vehicles, etc.) in real time. The captured data is sent with the video stream to the Dallmeier recording system for evaluation and storage and is available for further processing with the integrated EdgeAnalytics Apps.

Basic AI EdgeAnalytics Apps (optional)

The Basic EdgeAnalytics AI apps use the raw data of the AI Object Classification to assess the captured operations according to the specific criteria of various use cases. The Line Crossing App, for example, detects the crossing of a defined line by a relevant object (person, vehicle, etc.) and generates a corresponding message with time and direction of movement. The generated event messages and values complete the raw data already contained in the video stream and can be displayed and evaluated with a Dallmeier client software.

Wide Dynamic Range

The camera offers a WDR function (also known as High Dynamic Range (HDR)) for optimal recording of scenes with very bright and dark areas. Each image is captured with two special settings that are combined in real time to create a balanced result. The resulting video stream offers much more detail in both light and dark areas and is visually very close to the human eye's perception.

EdgeRecording

The camera allows parallel recording of two video streams (including analysis data) with different settings on an integrated SD card (optional). Local recording is triggered by the EdgeAnalytics event with the option to set a pre- and post-recording time. Additionally, the first video stream can be transferred to a recording system for permanent recording as usual.

Further features

- Video compression H.264, H.265, MJPEG
- Dynamic range WDR/HDR supported
- EdgeStorage (buffer) or EdgeRecording (two tracks)
- Ambient light sensor and integrated IR illumination
- Automatic switching of presets for day and night
- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile G, M, S and T
- Network protocol MQTT supported

High Definition Camera, 5 MP, H.265, day/night, WDR/HDR, PoE, Basic AI EdgeAnalytics optional, integrated IR illumination, compact surface mount dome housing

Camera		
	009257	DDF6050DN-FL High Definition Camera, 5 MP, H.265, day/night, WDR/HDR, PoE, Basic AI EdgeAnalytics optional, integrated IR illumination, compact surface mount dome housing, fixed focus lens 2.8 mm
	009258	DDF6050DN-VL High Definition Camera, 5 MP, H.265, day/night, WDR/HDR, PoE, Basic AI EdgeAnalytics optional, integrated IR illumination, compact surface mount dome housing, motor-driven varifocal lens 2.8 – 8 mm
Memory Extensions		
	008275	SD Card microSDHC 32 GB SD card microSDHC 32 GB for the memory extension of cameras, App Performance Class 1 (A1)
	008276	SD Card microSDHC 64 GB SD card microSDHC 64 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009318	SD Card microSDHC 128 GB SD card microSDHC 128 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009319	SD Card microSDHC 256 GB SD card microSDHC 256 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009160	SD Card microSDHC 512 GB SD card microSDHC 512 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009103	SD Card microSDHC 1TB SD card microSDHC 1TB for the memory extension of cameras, App Performance Class 1 (A1)
Accessories		
	004316	PoE Midspan 30 W Midspan power supply unit, 1x Ethernet port, 10/100/1000Base-T, 802.3at, 802.3af, 30 W
Included Support and License Interval		
Camera Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ¹⁾ for 60 months, unlimited license for the use of the VCA function based on motion detection, bring-in warranty for 24 months		
Optional Maintenance (after the included 60 months)		
008416	Camera Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ¹⁾ for 12 months	
Optional Function		
009321	DLC - EdgeAnalytics AI Apps (Basic) License for the use of EdgeAnalytics AI Basic Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI People Counting, AI Vehicle Counting, AI Vehicle Parking) based on the neural network for object classification (30-day trial license included)	
009322	DLC - Multicast Package License for the use of the Multicast Streaming function (static, dynamic, RTSP) with a camera of the Picoline series	

¹⁾ Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

PTZ Cameras



DDZ5000DN-IR Series

Ultra high definition PTZ network camera, 5/8 MP, H.265, day/night, WDR/HDR, PoE++, 40x zoom, integrated IR illumination, integrated heater, variable Mountera® mounting system



The DDZ5000DN-IR series offers high-speed PTZ network cameras with 40x zoom and integrated IR illumination. Both models are equipped with a high-performance PTZ mechanism and provide high-resolution video streams with up to 60/30 fps at a resolution of up to 5/8 MP with excellent contrast, brilliant clarity as well as highest detail resolution.

Domera® OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

PTZ home position EdgeAnalytics

In the PTZ home position, the camera optionally supports the use of the EdgeAnalytics Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing) based on Deep AI object classification using intensively trained neural networks. In the home position, the Essential Apps offer the complete range of functions already integrated in the 6000 camera series and deliver precise results for triggering actions with the integrated Domera® event management, even under difficult conditions (backgrounds with green areas, water surfaces, etc.).

Event-controlled recording

Dallmeier recording systems usually record the video stream of PTZ cameras permanently. If the EdgeAnalytics Essential Apps are used in the PTZ home position, it is possible to switch to event-controlled recording. In this case, when leaving the home position, the entire camera pan is recorded as well as every object detected in the new position.

Integrated IR illumination

The day/night operation is supported by an integrated wide-ranging IR illumination that is automatically adjusted to the selected zoom ratio. In the IR mode at night, the cameras provide excellent results due to the high infrared sensitivity and thus meets even the most demanding requirements in a 24-hour operation.

EdgeStorage

The cameras are equipped with a RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill function ensures fast transmission to the Dallmeier recording system. This stores the video stream with high speed and then continues to record the live stream seamlessly.

Further features

- High-speed pan/tilt/zoom mechanism
- 40x zoom with autofocus
- Digital image stabilization (EIS)
- Range of IR lighting up to 100 m
- Minimum illumination 0 lux (with IR LED On)
- Memory expansion with microSDXC card
- Wide Dynamic Range (WDR/HDR)
- Video Compression H.264, H.265, MJPEG
- 128 programmable preset positions
- GDPR-compliant functions for data protection and security
- Compatible with ONVIF Profile S and Profile T
- Network protocol MQTT supported
- Weatherproof IP69 housing with heater
- Compatible with the Mountera® mounting system

DDZ5000DN-IR Series

Ultra high definition PTZ network camera, 5/8 MP, H.265, day/night, WDR/HDR, PoE++, 40× zoom, integrated IR illumination, integrated heater, variable Mountera® mounting system

Camera		
	009087	DDZ5540DN-IR High definition PTZ network camera, 5 MP, H.265, day/night, WDR/HDR, PoE++, 40x zoom, integrated IR illumination, integrated heater, Mountera® outdoor dome housing
	009086	DDZ5840DN-IR Ultra high definition PTZ network camera, 8 MP, H.265, day/night, WDR/HDR, PoE++, 40x zoom, integrated IR illumination, integrated heater, Mountera® outdoor dome housing
Accessories		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm
Included Support and License Interval		
PTZ Camera Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ¹⁾ for 60 months, license for the update of neural networks for object classification for 60 months, bring-in warranty for 24 months		
Optional Maintenance (after the included 60 months)		
009144	PTZ Camera Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ¹⁾ for 12 months, license for the update of neural networks for object classification for 12 months	
Optional License		
009145	DLC - PTZ Camera EdgeAnalytics AI Apps (Essentials) Perpetual license for the use of EdgeAnalytics AI Apps (Essentials) with object classification in the PTZ home position (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI People Counting, AI Vehicle Counting)	

1) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

DDZ5530DN Series

High definition PTZ network camera, 5 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, Mountera® outdoor variant with integrated heater



The cameras of the DDZ5530DN series are high-speed PTZ network cameras with 30x optical zoom. They are equipped with a high-performance pan/tilt/zoom mechanism and provide real-time high-definition video with up to 60 fps at a resolution of up to 5 MP. The most advanced sensor and encoder technology and the sophisticated image processing provide recordings with excellent contrast, brilliant clarity as well as highest detail resolution and color fidelity.

Domera® OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

PTZ Home Position EdgeAnalytics

In the PTZ home position, the camera optionally supports the use of the EdgeAnalytics Essential Apps (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing) based on Deep AI object classification using intensively trained neural networks. In the home position, the Essential Apps offer the complete range of functions already integrated in the 6000 camera series and deliver precise results for triggering actions with the integrated Domera® event management, even under difficult conditions (backgrounds with green areas, water surfaces, etc.).

Event-Controlled Recording

Dallmeier recording systems usually record the video stream of PTZ cameras permanently. If the EdgeAnalytics Essential Apps are used in the PTZ home position, it is possible to switch to event-controlled recording. In this case, when leaving the home position, the entire camera pan is recorded as well as every object detected in the new position.

Wide Dynamic Range

The camera offers a WDR function (also known as High Dynamic Range (HDR)) for optimal recording of scenes with very bright and dark areas. The resulting video stream offers much more detail in both light and dark areas.

EdgeStorage

The camera is equipped with a RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill function ensures fast transmission to the Dallmeier recording system. This stores the video stream with high speed and then continues to record the live stream seamlessly.

Variants

The dome cameras of the DDZ5530DN series are offered in an in-ceiling or surface mount housing for indoor use. Additionally, a robust variant for outdoor use with heating is available that is compatible with all wall and ceiling mounts of the Mountera® Quick-Lock system. All models can be supplied conventionally with an external power supply unit or conveniently Power over Ethernet (PoE+).

Further features

- High-speed pan/tilt/zoom mechanism
- 30x optical zoom with auto-focus
- Digital image stabilization (EIS)
- Memory expansion with SD card
- Video compression H.264, H.265, MJPEG
- 128 programmable preset positions
- GDPR-compliant functions for data protection and security
- Mountera® outdoor variant with integrated heater
- Compatible with ONVIF Profile S and Profile T
- Network protocol MQTT supported

DDZ5530DN Series

High definition PTZ network camera, 5 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, Mountera® outdoor variant with integrated heater

In-Ceiling Mount Variant



009083

DDZ5530DN Indoor IM

High definition PTZ network camera, 5 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, in-ceiling mount variant

Surface Mount Variant



009084

DDZ5530DN Indoor SM

High definition PTZ network camera, 5 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, surface mount variant

Outdoor Variant



009085

DDZ5530DN Outdoor

High definition PTZ network camera, 5 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, Mountera® outdoor variant with integrated heater

Accessories for Outdoor Variant



007054

Mountera® Box with PSU

Mountera® Box with power supply unit, 48V DC, 5.4 A, 260 W, IP69, white



006979

Mountera® Wall Bracket

Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white



006980

Mountera® Ceiling Bracket

Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white



007428

Mountera® Cable Set C

Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

Included Support and License Interval

PTZ Camera Support and License Interval Basic

License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates¹⁾ for 60 months, license for the update of neural networks for object classification for 60 months, bring-in warranty for 24 months

Optional Maintenance (after the included 60 months)

009144

PTZ Camera Software Maintenance (Plus 12 Months)

License for the update of Domera® OS with updates, upgrades and security updates¹⁾ for 12 months, license for the update of neural networks for object classification for 12 months

Optional License

009145

DLC - PTZ Camera EdgeAnalytics AI Apps (Essentials)

Perpetual license for the use of EdgeAnalytics AI Apps (Essentials) with object classification in the PTZ home position (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI People Counting, AI Vehicle Counting)

¹⁾ Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.

DDZ5230DN Series

High definition PTZ network camera, 2 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing



The cameras of the DDZ5230DN series are high-speed PTZ network cameras with 30x optical zoom. They are equipped with a high-performance pan/tilt/zoom mechanism and provide real-time high-definition video with up to 60 fps at a resolution of up to 2 MP. The most advanced sensor and encoder technology and the sophisticated image processing provide recordings with excellent contrast, brilliant clarity as well as highest detail resolution and color fidelity.

Domera® OS

The cameras are equipped with the hardened Linux operating system Domera® OS. In addition to a kernel with long-term support, it offers extensive security functions such as the deactivation of unused ports or the enforcement of strict passwords. In addition, Domera® OS supports secure network authentication (IEEE 802.1X) and encrypted data transmission (TLS 1.3/AES-256). All software components are subject to permanent monitoring, maintenance and updating, while the effectiveness of all measures is ensured by regular external penetration tests.

PTZ home position EdgeAnalytics

In the PTZ home position, the camera optionally supports the use of the EdgeAnalytics Essential Apps based on Deep AI object classification. The Essential Apps offer the full range of functions already integrated in the 6000 camera series in the home position and deliver precise results for triggering actions with the integrated Domera® event management, even under difficult conditions (backgrounds with greenery, water surfaces, etc.).

Event-controlled recording

Dallmeier recording systems usually record the video stream of PTZ cameras permanently. If the EdgeAnalytics Essential Apps are used in the PTZ home position, it is possible to switch to event-controlled recording. In this case, when leaving the home position, the entire camera pan is recorded as well as every object detected in the new position.

Wide Dynamic Range

The camera offers a WDR function (also known as High Dynamic Range (HDR)) for optimal recording of scenes with very bright and dark areas. The resulting video stream offers much more detail in both light and dark areas and is visually very close to the human eye's perception.

EdgeStorage

The camera is equipped with a RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill function ensures fast transmission to the Dallmeier recording system. This stores the video stream with high speed and then continues to record the live stream seamlessly.

Variants

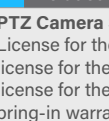
The dome cameras of the DDZ5230DN series are offered in an in-ceiling or surface mount housing for indoor use. Additionally, a robust variant for outdoor use with passive heating is available. All models can be supplied conventionally with an external power supply unit or conveniently Power over Ethernet (PoE+).

Further features

- High-speed pan/tilt/zoom mechanism
- 30x optical zoom with auto-focus
- Digital image stabilization (EIS)
- Memory expansion with SD card
- Video compression H.264, H.265, MJPEG
- 128 programmable preset positions
- GDPR-compliant functions for data protection and security
- Outdoor variant with Passive Heating (waste heat)
- Compatible with ONVIF Profile S and Profile T
- Network protocol MQTT supported

DDZ5230DN Series

High definition PTZ network camera, 2 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing

In-Ceiling Mount Variant		
	009080	DDZ5230DN Indoor IM High definition PTZ network camera, 2 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, in-ceiling mount variant
Surface Mount Variant		
	009081	DDZ5230DN Indoor SM High definition PTZ network camera, 2 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, surface mount variant
Outdoor Variant		
	009082	DDZ5230DN Outdoor High definition PTZ network camera, 2 MP, H.265, Day/Night, WDR/HDR, PoE+, 30x optical zoom, dome housing, outdoor variant
Accessories for Outdoor Variant		
	009128	DDZ Outdoor Wall Bracket L Bracket for the installation of a DDZ5230DN Outdoor camera on walls, internal cable routing, powder-coated, white
	009129	DDZ Outdoor Ceiling Bracket 25 Bracket for the installation of a DDZ5230DN Outdoor camera on ceilings, internal cable routing, length 25 cm, powder-coated, white
	009137	DDZ Outdoor Corner Adapter Adapter for the installation of a DDZ5230DN Outdoor camera on corners, compatible with the DDZ Outdoor Wall Bracket L, powder-coated, white
	009138	DDZ Outdoor Pole Adapter Adapter for the installation of a DDZ5230DN Outdoor camera on poles, compatible with the DDZ Outdoor Wall Bracket L, powder-coated, white
Included Support and License Interval		
PTZ Camera Support and License Interval Basic License for the use of the support services of the Support Level Basic for 60 months, license for the update of Domera® OS with updates, upgrades and security updates ¹⁾ for 60 months, license for the update of neural networks for object classification for 60 months, bring-in warranty for 24 months		
Optional Maintenance (after the included 60 months)		
009144	PTZ Camera Software Maintenance (Plus 12 Months) License for the update of Domera® OS with updates, upgrades and security updates ¹⁾ for 12 months, license for the update of neural networks for object classification for 12 months.	
Optional License		
009145	DLC - PTZ Camera EdgeAnalytics AI Apps (Essentials) Perpetual license for the use of EdgeAnalytics AI Apps (Essentials) with object classification in the PTZ home position (AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI People Counting, AI Vehicle Counting)	

1) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire runtime of the software maintenance.



Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Mountera® Accessories



Mountera® Box with PSU

Mountera® Box with 260 W power supply unit for the supply of camera systems on site, weather-protected IP 69 housing, compact, fanless and energy-efficient

The innovative **Mountera® Quick-Lock System** is a completely new concept for **quick and easy installation** of the latest camera and Panomera® systems. The Mountera® system consistently continues the **elegant design line** of the camera systems, allowing visually appealing and yet **robust installations without visible cables**. The comprehensive system offers a wide range of **mounting options** and, in combination with the power supply or recording on site, it is also attractive for its **discreet installation that is reduced to the essentials**.



Power supply

The Mountera® Box with PSU is designed for the power supply of Panomera® systems and cameras directly at the installation site. The robust power supply unit outputs up to 260 W and thus allows the supply of two Panomera® systems.

Direct mounting

The Mountera® Box can be combined with the various brackets of the Mountera® Quick-Lock System, which allow direct mounting of Panomera® systems or cameras on the box. This results in a robust and weatherproof overall system with a discreet installation that is reduced to the essentials.

Internal cable routing

The Mountera® Box is optimized for the combination with the internal cable routing of the Mountera® Brackets. The connecting cables can be led into the interior of the Mountera® Box via a weatherproof sleeve. This makes the entire system stand out due to its harmonious and safe appearance without any visible cables.

Finish

Like the camera systems and brackets, the Mountera® Box is made of robust aluminium. Its chromated surface has a signal white (RAL 9003) powder coating, which has been tested for seawater resistance according to DIN EN 60068-2.

Mounting

The Mountera® Box can be attached directly to a wall or ceiling or, in combination with an optional adapter, to a pole with a diameter of 100 to 300 mm.

Note

The band clamps for mounting on the pole are not included in the scope of delivery of the optional adapter. Dallmeier recommends the use of stainless steel bands with a width of 16 mm.

Features Hardware

- Mountera® Box with robust 260 W power supply unit
- Adapter for Mountera® Ceiling Bracket optional
- Adapter for mounting on a pole optional

Mountera® Box with PSU

Mountera® Box with 260 W power supply unit for the supply of camera systems on site, weather-protected IP 69 housing, compact, fanless and energy-efficient

Box		
	007054	Mountera® Box with PSU Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white
	008325	Mountera® Box with PSU and Media Converter Mountera® Box with power supply unit (48 V DC, 5.4 A, 260 W) and Gigabit Ethernet converter for conversion from copper (1x 100/1000Base-T RJ45 port (PoE+)) to fiber optic cabling (1x 100/1000Base-X SFP port), without SFP module, IP69, white
	007519	Mountera® Box Mountera® Box, empty housing, IP69, white
Bracket		
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, height 150 mm, white
Adapters		
	009108	Mountera® Ceiling Bracket Box Adapter Adapter for the modification of a Mountera® Ceiling Bracket for mounting on a Mountera® Box, 4x self-locking screws (microencapsulated), powder-coated, white
	009109	Mountera® Box Pole Adapter Adapter for installing a Mountera® Box on poles with a diameter of 100 – 300 mm, 4x self-locking screws (micro-encapsulated), without band clamps, powder-coated, white
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm
SFP Modules for Media Converter		
	006291	Microsens SFP Module Singlemode Gigabit Ethernet SFP Transceiver Singlemode, 1000BASE-LX/LH optical port for fiber cabling (1,310 nm, 10 km)
	006360	Microsens SFP Module Multimode Gigabit Ethernet SFP Transceiver Multimode, 1000BASE-SX optical port for fiber cabling (850 nm, 550 m)

Mountera® Accessories

Accessories for various components of the Mountera® system, modification, wiring, spare parts

Bracket

The Mountera® system offers various brackets for mounting a camera on walls and ceilings or on a Mountera® Box.

Bracket		
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, height 155 mm, white
	007992	Mountera® Ceiling Bracket 50 Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, height 56 cm, safety rope 70 cm included, white
	007993	Mountera® Ceiling Bracket 100 Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, height 106 cm, safety rope 120 cm included, white

Adapter

The Mountera® system adapters allow the brackets to be mounted on corners or poles. There is also one adapter for converting the Ceiling Bracket for mounting on a Mountera® Box as well as one adapter for mounting a Panomera® W 4/8 in suspended ceilings.

Adapter		
	007321	Mountera® Corner Adapter Mountera® adapter for the installation of a Mountera® Wall Bracket at external corners of buildings, white
	007608	Mountera® Vandalproof Pole Adapter 100 - 300 mm Mountera® Adapter for the installation of a Mountera® Wall Bracket on masts with 100 - 300 mm diameter, vandal-resistant, cable gland M25 x 1.5, without band clamps, white
	009108	Mountera® Ceiling Bracket Box Adapter Adapter for the modification of a Mountera® Ceiling Bracket for mounting on a Mountera® Box, 4x self-locking screws (microencapsulated), powder-coated, white
	009109	Mountera® Box Pole Adapter Adapter for installing a Mountera® Box on poles with a diameter of 100 – 300 mm, 4x self-locking screws (micro-encapsulated), without band clamps, powder-coated, white
	007536	Mountera® In-Ceiling Adapter W 4/8 Mountera® adapter for the installation of a Panomera® W 4/8 in suspended ceilings, robust steel construction, black
	008158	Mountera® S 4/8 Extension Kit Mountera® extension set for mounting a Mountera® housing (Panomera® S/W, PTZ) on the bottom of a Panomera® S4 or S8

Sunshield for Panomera® S 4/8

Sunshield		
	009252	Panomera® Sunshield Sunshield for Panomera® S4 and S8 models with Mountera® housing, aluminium, white with black front panel

Mountera® Accessories

Accessories for various components of the Mountera® system,
modification, wiring, spare parts

Cable Set

The Mountera® Cable Set C is suitable for connection of camera systems to the RJ45 interface of a Mountera® Box.

Cable Set		
	007428	Mouter® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1x cable seal, 1x cable power supply/grounding, 1x cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

Network Cable Cat7

Network Cable Cat7		
	005106	Network Cable Cat7 3 m Network cable Cat7 with STX V4 RJ45 to RJ45 plugs, black, UV-resistant and flexible, length 3 m
	007036	Network Cable Cat7 5 m Network cable Cat7 with STX V4 RJ45 to RJ45 plugs, black, UV-resistant and flexible, length 5 m
	007037	Network Cable Cat7 10 m Network cable Cat7 with STX V4 RJ45 to RJ45 plugs, black, UV-resistant and flexible, length 10 m

Power Supply Cable

The cable has five cores and is particularly suitable for the power supply of Panomera® systems including heating.

Power Supply Cable		
	007459	Power Cable 5x Cores 3 m Power supply cable for camera systems (including heating), 5x cores 1.5 mm², Harting Power plug, UV-resistant and flexible, black, length 3 m
	007738	Power Cable 5x Cores 10 m Power supply cable for camera systems (including heating), 5x cores 1.5 mm², Harting Power plug, UV-resistant and flexible, black, length 10 m
	007611	Power Cable 5x Cores 25 m Power supply cable for camera systems (including heating), 5x cores 1.5 mm², Harting Power plug, UV-resistant and flexible, black, length 25 m (delivery time on request)
	007612	Power Cable 5x Cores 50 m Power supply cable for camera systems (including heating), 5x cores 1.5 mm², Harting Power plug, UV-resistant and flexible, black, length 50 m (delivery time on request)

Power Supply Unit

The power supply unit is suitable for parallel supply of camera and heater.

Power Supply Unit		
	006434	Power Supply Unit 48 V DC, 5.4 A Slimline Power supply for Panomera®, 48 V DC, 5.4 A, suitable for DIN rails according to EN 50022 suitable for power supply of two Panomera® systems with heater

Mountera® Accessories

Accessories for various components of the Mountera® system,
modification, wiring, spare parts

SFP Module

The SFP modules allow the adaptation of a Mountera® Box with PSU and Media Converter to the type of fiber optic cabling used.

SFP Modules		
	006291	Microsens SFP Module Singlemode Gigabit Ethernet SFP Transceiver Singlemode, 1000BASE-LX/LH optical port for fiber cabling (1,310 nm, 10 km)
	006360	Microsens SFP Module Multimode Gigabit Ethernet SFP Transceiver Multimode, 1000BASE-SX optical port for fiber cabling (850 nm, 550 m)

Network Cable Optical Fiber

Network Cable Multimode		
	007744	Network Cable Optical Fibre LC/LC Multimode 5 m Network cable optical fiber multimode with LC to LC plugs, black, UV-resistant and flexible, length 5 m
	007745	Network Cable Optical Fibre LC/LC Multimode 10 m Network cable optical fiber multimode with LC to LC plugs, black, UV-resistant and flexible, length 10 m

Network Cable Singlemode		
	007746	Network Cable Optical Fibre LC/LC Singlemode 5 m Network cable optical fiber singlemode with LC to LC plugs, black, UV-resistant and flexible, length 5 m
	007747	Network Cable Optical Fibre LC/LC Singlemode 10 m Network cable optical fiber singlemode with LC to LC plugs, black, UV-resistant and flexible, length 10 m

Safety Rope

The safety rope allows an additional fall protection of a camera system if the safety rope integrated in the Mountera® brackets is not sufficient due to special regulations.

Safety Rope		
	007719	Safety Rope 114 cm Safety rope with carabiner for secondary securing of camera systems, load up to 20 kg at drop height 10 cm, length 114 cm

Mountera® Accessories

Accessories for various components of the Mountera® system,
modification, wiring, spare parts

Ball Joint Upgrade Kit Ex Factory

Upgrade Kit		
	007901	Mountera® Ball Joint 30° 3D Adjustable Surcharge for equipping a Panomera® of the S series with the 30° plug instead of the 15° standard plug, gimbal-mounted suspension with vertical tilt up to 30°, horizontal tilt up to 15°, stepless positioning and precise adjustment with four set screws, 15°/30° sleeve included (ex works only)

Ball Joint Retrofit Kit

Retrofit Kit		
	007902	Mountera® Ball Joint 30° 3D Adjustable Retrofit Kit Retrofit kit for Panomera® S series, gimbal-mounted suspension with vertical tilt up to 30°, horizontal tilt up to 15°, stepless positioning and precise adjustment with four set screws, 15°/30° sleeve and microencapsulated screws included
	007903	Mountera® Ball Joint 15° Retrofit Kit Retrofit kit for Panomera® S series, gimbal-mounted suspension with vertical tilt up to 15°, horizontal tilt up to 7°, stepless positioning, 15°/30° sleeve and microencapsulated screws included
	007904	Mountera® Ball Joint 5° Retrofit Kit Retrofit kit for Panomera® W series and DDZ5000 series, gimbal-mounted suspension with vertical tilt up to 5°, horizontal tilt up to 5°, stepless positioning, 5° sleeve and microencapsulated screws included

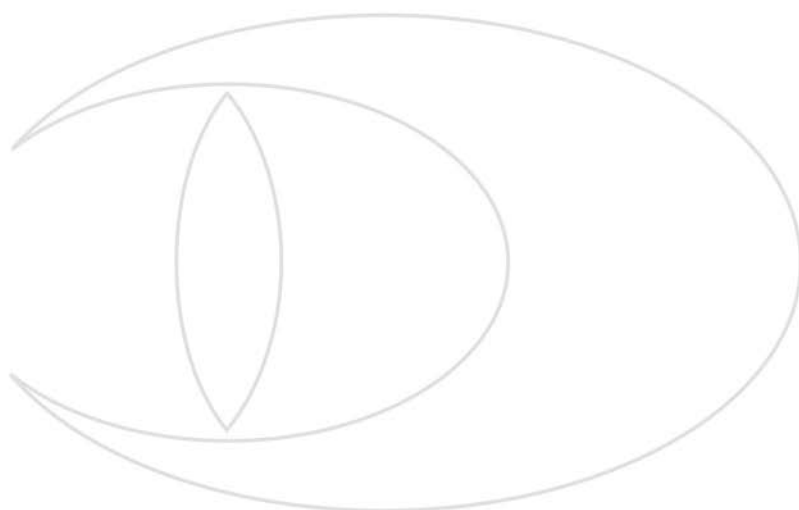
Small Parts

Small Parts		
	007905	Mountera® Sleeve 15°/30° Mountera® sleeve for the transition between camera system and bracket, suitable for Mountera® Ball Joint 15° and 30°, weatherproof, black
	007283	Mountera® Sleeve 5° Mountera® sleeve for the transition between camera system and bracket, suitable for Mountera® Ball Joint 5°, weatherproof, black
	007614	Mountera® Box Cable Seal Mountera® cable seal for the transition between bracket and Mountera® box, weatherproof, black
	006967	HARTING Power Plug HARTING power plug for the connection of the power supply of a camera system to a Mountera® Box, 5x poles, black
	007742	Telegärtner RJ45 Plug Telegärtner STX V4 RJ45 plug for the connection of a camera system to a Mountera®Box, protective cap included, black

Notes

[illegible]

Domera® Accessories



Accessories for the installation and extension of Domera® cameras
as well as compatible components of the Mountera® system

Illumination (series RDF6000DN and RDF5000DN, SDF6800DN)		
	008636	Domera® Dual Matrix LED Ring Retrofit Kit Illumination for Domera® in-ceiling housing, five IR LEDs and five white light LEDs, event-controlled switching between IR and white light illumination, individual control of the intensity of individual LEDs or automatic adjustment to the captured scene, microphone included, recommended for models with 4.5 - 9.7 mm or fisheye lens
Illumination (series RDF5000DN version E)		
	008895	Domera® IR LED Stripe Retrofit Kit Illumination for Domera® in-ceiling housing, three IR LEDs with 180° in total, individual control of the intensity of individual LEDs or automatic adjustment to the captured scene, for RDF5000DN version E, recommended for models with 3 - 10 mm lens, optimized for horizontal mounting of the camera ¹⁾
Housing Cover		
	008408	Domera® Housing Cover Vandalproof LED Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, with cut-outs for IR and white light LEDs ²⁾
	008529	Domera® Housing Cover Vandalproof Black Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, black, cannot be combined with cameras with Domera® Dual Matrix LED Ring
	008410	Domera® Housing Cover Vandalproof White Housing cover for Domera® in-ceiling housing, can be combined with Domera® Surface Mount Adapter and Domera® Wall Bracket, aluminum, white, cannot be combined with cameras with Domera® Dual Matrix LED Ring
Sunshield		
	009253	Domera® Sunshield Sunshield with housing cover for Domera® dome housings, five cut-outs for IR and white light LEDs, aluminium, black
Adapters and Brackets		
	008407	Domera® Surface Mount Adapter Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, polycarbonate, white
	009177	Domera® Surface Mount Adapter Vandalproof Adapter for surface mounting a Domera® in-ceiling housing, safety rope included, aluminum, white
	008209	Domera® Wall Bracket Multifunctional bracket for mounting a Domera® in-ceiling housing on a wall or pole, compatible with the Mountera® Vandalproof Pole Adapter and the Mountera® Box, safety rope included, aluminum, white
	008508	Domera® Wall Bracket with Speaker Multifunctional bracket for mounting a Domera® in-ceiling housing on a wall or pole, compatible with the Mountera® Vandalproof Pole Adapter and the Mountera® Box, Domera® Speaker with connection cable and NF amplifier 1.4 W included, recommended for use as intercom system, safety rope included, aluminum, white
	008635	Domera® Corner Adapter Domera® adapter for the installation of a Domera® Wall Bracket at external corners of buildings, aluminum, white
	008884	Domera® Wall Bracket Adapter (IR Box) Adapter for mounting a DOMREA® Wall Bracket on the wall bracket drill holes of a DF4000HD-DN/IR and DF5000HD-DN/IR series Dallmeier IR camera, aluminum, white

1) When mounted vertically on walls, shadowing occurs in the lower image area due to the design.

2) Installation with tool, IR transmission 100%, white light transmission 100%, reflection-free at tilt from 0° to 90°

Accessories for the installation and extension of Domera® cameras
as well as compatible components of the Mountera® system

Extensions		
	008421	Domera® Breakout Cable Breakout cable with 1x Audio Line IN, 1x Audio Line OUT, 2x Contact IN, 2x Contact OUT, 1x power supply
	008896	Domera® Passive Heating Retrofit Kit Fan based heating by using the waste heat of the electronic components (approx. 6 W) to prevent fogging on the inside of the dome, manual remote control via Domera® OS user interface ³⁾
	008752	Domera® Tinted Bubble Tinted bubble for Domera® in-ceiling housing, compatible with all Domera® housing covers and adapters, without sealing ring and inner liner, high-impact polycarbonate, impact resistance IK10, diameter 4.5"
	009261	Domera® 4x Surface Cabling Adapter Four adapters for feeding surface-mounted cabling into a Domera® Surface Mount Adapter Vandalproof, suitable for M25 screw connection, black
	008422	DOMERA® Speaker Retrofit Kit Speaker for installation in a DOMERA® Wall Bracket, NF amplifier 1.4 W included, recommended for use as an intercom system
Memory Extensions		
	008275	SD Card microSDHC 32 GB SD card microSDHC 32 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	008276	SD Card microSDHC 64 GB SD card microSDHC 64 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009318	SD Card microSDHC 128 GB SD card microSDHC 128 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009319	SD Card microSDHC 256 GB SD card microSDHC 256 GB for the memory extension of cameras, UHS Speed Class 3 (U3), App Performance Class 1 (A1)
	009160	SD Card microSDHC 512 GB SD card microSDHC 512 GB for the memory extension of cameras, App Performance Class 1 (A1)
	009103	SD Card microSDHC 1TB SD card microSDHC 1TB for the memory extension of cameras, App Performance Class 1 (A1)
Rubber Grommet Set		
	008807	Domera® 5x Rubber Grommet Set Five spare part sets for Domera® cameras, each consisting of 2x grommet long, 1x grommet short, 1x threading aid, 1x housing seal and 1x holder for Telegärtner RJ45 coupling insert

Accessories for the installation and extension of Domera® cameras as well as compatible components of the Mountera® system

Safety Rope for Domera® In-Ceiling Housing		
	008713	Domera® IM Safety Rope Set Set consisting of 10x safety rope with carabiner for Domera® in-ceiling housing, length 70 cm
Mountera® Adapter		
	007608	Mountera® Vandalproof Pole Adapter 100 - 300 mm Mountera® Adapter for the installation of a Mountera® Wall Bracket on masts with 100 - 300 mm diameter, vandal-resistant, cable gland M25 x 1.5, without band clamps, white
Mountera® Box		
	007519	Mountera® Box Mountera® Box, empty housing, IP69, white
	008325	Mountera® Box with PSU and Media Converter Mountera® Box with power supply unit (48 V DC, 5.4 A, 260 W) and Gigabit Ethernet converter for conversion from copper (1x 100/1000Base-T RJ45 Port (PoE+) to fiber optic cabling (1x 100/1000Base-X SFP Port), without SFP module, IP69, white
Accessories for Media Converter		
	006291	Microsens SFP Module Singlemode Gigabit Ethernet SFP transceiver singlemode, 1000BASE-LX/LH optical port for fiber cabling (1,310 nm, 10 km)
	006360	Microsens SFP Module Multimode Gigabit Ethernet SFP transceiver multimode, 1000BASE-SX optical port for fiber cabling (850 nm, 550 m)
Network Cable Multimode for Media Converter		
	007744	Network Cable Optical Fibre LC/LC Multimode 5 m Network cable optical fiber multimode with LC to LC plugs, black, UV-resistant and flexible, length 5 m
	007745	Network Cable Optical Fibre LC/LC Multimode 10 m Network cable optical fiber multimode with LC to LC plugs, black, UV-resistant and flexible, length 10 m
Network Cable Singlemode for Media Converter		
	007746	Network Cable Optical Fibre LC/LC Singlemode 5 m Network cable optical fiber singlemode with LC to LC plugs, black, UV-resistant and flexible, length 5 m
	007747	Network Cable Optical Fibre LC/LC Singlemode 10 m Network cable optical fiber singlemode with LC to LC plugs, black, UV-resistant and flexible, length 10 m

Recording Systems



SeMSy® Recording Server, rack-mount, recording of up to 120× video streams (8× included), total bit rate up to 480 Mbps, RAID 6, storage system with up to 8× 3.5" HDD



The IPS 10000 appliance in the MK2 revision combines the recording software SeMSy® Recording Server (V10) with a reliable and high-performance server hardware. Perfectly matched components ensure high storage speed and allow the recording of up to 120 high-resolution video streams at a frame rate of 30 fps. The integrated RAID 6 storage system already provides a high storage capacity and can be expanded by an external RAID 6 JBOD system.

Storage System

The IPS 10000 has eight lockable bays for 3.5" hard disks on the front side, which are used for recording video streams and storing EdgeAnalytics data. The hardened Linux operating system and the SeMSy® Recording Server application are installed on a separate flash module. Fully equipped with the optionally offered 24 TB server hard disks, a RAID 6 storage capacity of 144 TB is available.

SeMSy® Compact

SeMSy® Compact allows independent and convenient evaluation of the recordings over the network. The software can be installed on workstations with Windows operating system and adjusted individually. Two licenses for access with clients are already included in the scope of delivery of the appliance.

PRemote-HD

The optional PRemote-HD function transcodes high-definition video streams (live and playback) for transmission in low-bandwidth networks. It allows the resource-conserving access with SeMSy® Compact or a SeMSy® Workstation which is independent of the recording settings. This license also enables mobile access to transcoded video streams with SeMSy® Mobile Client.

EdgeAnalytics Database

The appliance is equipped with a database for the analysis results of Dallmeier cameras and Panomera® systems with EdgeAnalytics technology. The received events, objects and classes are stored with the relevant metadata almost in real-time. SeMSy® Compact is available for the targeted search and evaluation of the events with the SmartFinder function.

SmartBackfill

Dallmeier cameras are equipped with RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill feature ensures fast transfer to the SeMSy® recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

Recording of 3rd party cameras

The pre-installed SeMSy® Recording Server software is designed as an open platform. Together with the according licenses, third-party cameras can be recorded with motion detection and configured over the ONVIF protocol.

Recording of Panomera® cameras

For the recording of a Panomera® multifocal sensor system, only one licensed recording channel is required for the first sensor. For all other Panomera® sensors, only free channels must be available, but these do not need to be licensed for recording.

Features Hardware

- High performance server hardware
- Flash module for operating system and application
- Hot-swap of the hard disks supported
- Optimized for high storage speed
- Redundant operation with three included power supplies
- Mounting rails for 19" rack included in delivery

Features SMAVIA Recording Server

- Recording of up to 120 high-resolution video streams
- Licenses for the recording of 8 video streams included
- Licenses for access with two SeMSy® Compact clients included
- Licenses for the update of the software for 12 months included
- Recording of 3rd party cameras optional
- Cameras with ONVIF Profile S and Profile T supported
- Mobile access with SeMSy® Mobile Client supported
- Evaluation with SeMSy® Compact/Workstation over WAN/LAN
- GDPR-compliant functions for data protection and data security

SeMSy® Recording Server, rack-mount, recording of up to 120× video streams (8× included), total bit rate up to 480 Mbps, RAID 6, storage system with up to 8× 3.5" HDD

Appliance		
	008051.402	IPS 10000 SeMSy® Recording Server, rack-mount, recording of up to 120× video streams (8× included), total bit rate up to 480 Mbps, RAID 6, storage system with up to 8× 3.5" HDD, 3× redundant power supplies, variant without HDD
Hard Disk Drive		
	000178	Mounting of a HDD Mounting of a HDD, including functional, long-term and final test, acceptance and approval
	007521	HDD 2000 GB, SATA, 3.5" ¹⁾
	007305	HDD 4000 GB, SATA, 3.5" ¹⁾
	009156	HDD 6000 GB, SATA, 3.5" ¹⁾
	007914	HDD 8000 GB, SATA, 3.5" ¹⁾
	008997	HDD 10000 GB, SATA, 3.5" ¹⁾
	009023	HDD 12000 GB, SATA, 3.5" ¹⁾
	009174	HDD 14000 GB, SATA, 3.5" ¹⁾
	008183	HDD 16000 GB, SATA, 3.5" ¹⁾
	008055	HDD 18000 GB, SATA, 3.5" ¹⁾
	009141	HDD 20000 GB, SATA, 3.5" ¹⁾
	009000	HDD 22000 GB, SATA, 3.5" ¹⁾
	009146	HDD 24000 GB, SATA, 3.5" ¹⁾
Storage Extension		
	005756	DLC - JBOD Storage Extension License for the use of the software interface for the connection of a Storage JBOD storage extension
	009168	MegaRAID Controller 9580-8i8e Kit RAID controller board for the connection of a JBOD storage extension, CacheVault for the power supply of the cache in case of short-term power outages included, 12 Gbps SAS, 6 Gbps SATA (ex factory only)
	008476	Storage JBOD 12 III ¹⁾ Storage extension, 2 RU rack-mount, for up to 12 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006946	Storage JBOD 24 II ¹⁾ Storage extension, 4 RU rack-mount, for up to 24 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006949	Storage JBOD 44 II ¹⁾ Storage extension, 4 RU rack-mount, for up to 44 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives

¹⁾ The appliance and the Storage JBOD are operated with RAID 6 storage system and must be equipped with at least 6 identical SATA hard disks (8 hard disks recommended) to ensure the required storage speed. The JBOD system has its own RAID system. A RAID array with the internal hard disks of the appliance is not supported.

SeMSy® Recording Server, rack-mount, recording of up to 120× video streams (8× included), total bit rate up to 480 Mbps, RAID 6, storage system with up to 8× 3.5" HDD

Network Contacts		
	005142	DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)
	001739	Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contacts, 6× relays (MOXA ioLogik E1214)
Power Supply Unit		
	009079	Power Supply Unit DPM-150W with ALB Rev. 2.0 CB Power supply module 150 W, 115/230 V AC ±5%, 50/60 Hz, with Adaptive Load Board (Three power supply modules already included in the scope of delivery)

SeMSy® Recording Server, rack-mount, recording of up to 120× video streams (8× included), total bit rate up to 480 Mbps, RAID 6, storage system with up to 8× 3.5" HDD

Included Licenses	
DLC - 8 Recording Channels	License for the recording of 8 high-resolution video streams
DLC - 2 Client Access	License for the simultaneous access of two SeMSy® Compact clients with basic functions to SeMSy® Recording Server (floating license)
DLC - SEDOR® Camera Sabotage Protection	License for detection and reporting of covering, defocusing and twisting of cameras
DLC - SmartBackfill	License for the storage of video streams that have been buffered by Dallmeier cameras with EdgeStorage (not available in combination with DLC - Bank Package and for cameras with recording mode Contact)
DLC - SNMP	License for integration into a central SNMP device management system
DLC - SeMSy® III and 5 Flat	License for integration into a SeMSy® III or HEMISPHERE® SeMSy® 5 Video Management System
DLC - Multicast Streaming	License for the transmission of video streams via multicast in a SeMSy® Video Management System
DLC - Multicast Recording	License for the recording of video streams of Dallmeier cameras transmitting via multicast
DLC - Real-Time Recording	License for real-time recording for all video streams (depending on the camera)
DLC - RAID 6	License for the use of the integrated RAID 6 storage system
DLC - Data Protection and Data Security	Basic license for use of the integrated data protection and data security module (GDPR-compliant)
Included Support and License Interval	
IPS 10000 Support and License Interval Basic	License for the use of the support services of the Support Level Basic for 60 months, license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months, license for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months, license for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 12 months, bring-in warranty for 24 months
Optional Support and License Interval	
008271 IPS 10000 Support and License Interval Premium (Plus 12 Months)	License for the use of the support services of the Support Level Premium for 12 months, license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months, ³⁾ license for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months, ³⁾ license for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 12 months
008272 IPS 10000 Support and License Interval Premium and Warranty (Total of 60 Months)⁴⁾	License for the use of the support services of the Support Level Premium for 60 months, unlimited license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients, unlimited license for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients, license for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 60 months, extension of the bring-in warranty (without hard disk drives) from 24 months to a total of 60 months

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire term of the software maintenance.
3) After a gap-free Premium licensing period of 60 months, the comfort functions and extensions can be used with SeMSy® Compact Clients for an unlimited period of time.
4) Ordering recommended ex works. Subsequently orderable within the included bring-in warranty of 24 months.

SeMSy® Recording Server, rack-mount, recording of up to 120× video streams (8× included), total bit rate up to 480 Mbps, RAID 6, storage system with up to 8× 3.5" HDD

Optional Licenses (Access)	
003782	DLC - 1 Additional Client Access License for the use of simultaneous access with basic functions by an additional SeMSy® Compact client to SeMSy® Recording Server (floating license)
004068	DLC - 5 Additional Client Access License for the use of simultaneous access with basic functions by five additional SeMSy® Compact clients to SeMSy® Recording Server (floating license)
004069	DLC - 10+ Additional Client Access (unlimited) License for the use of simultaneous access with basic functions by an unlimited number of SeMSy® Compact clients to SeMSy® Recording Server, depending on system load and bandwidth (floating license)
Optional Licenses (Channels)	
005754	DLC - 1 Additional Recording Channel (IPS 10000) License for the use of an additional channel for the recording of one high-resolution video stream, in total maximum 120 video streams
005755	DLC - 3rd Party Package for 1 Recording Channel (IPS 10000) License for the use of one existing channel for recording (permanent, contact triggered or with motion detection) of third-party cameras
Optional Licenses (Functions)	
003801	DLC - PRemote-HD License for the transmission of SD and HD video at low bandwidth, including a dedicated access license and the function for accessing transcoded video streams with SeMSy® Mobile Client
004685	DLC - LAN Interface for Data Reception License for the reception of data from third-party systems (AWEK POS systems and NPC II protocol converters) over the network interface, including linking, storage and display of the data with the video recordings
006293	DLC - High-Speed Recording >30 fps License for the recording of Dallmeier cameras with a frame rate of more than 30 fps
006899	DLC - ViProxy Plus (IPS 10000) License for the use of the second network interface in combination with one of the functions ViProxy (physically separated network for cameras, including WebConfig routing), Link Redundancy (redundant connection of the appliance to two switches) or Data Throughput (bundling of both network interfaces to one channel with double data throughput)
Optional Licenses (Extensions SeMSy® Compact)	
007238	DLC - SC AutoTracking for Single Sensor Camera License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Dallmeier network camera with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007239	DLC - SC AutoTracking for Panomera® S/W 4 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 4 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007237	DLC - SC AutoTracking for Panomera® S/W 8 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 8 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007092	DLC - SC Dashboard Support License for the use of the SeMSy® Compact Dashboard function (graphical display of the analysis data Line Crossing, Intrusion Detection and Object Counting including object types), only in connection with Dallmeier cameras and Panomera® systems with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance

Notes

This image shows a full page of blank, lined paper. It features approximately 28 horizontal grey lines spaced evenly apart, typical of standard notebook paper. The lines extend across the entire width of the page, leaving small margins at the top and bottom. There are no vertical lines, text, or other markings present.

SeMSy® Recording Server, stand-alone, recording of up to 40x video streams (8x included), total bit rate up to 160 Mbps, RAID 1 optional, storage system with up to 2x 3.5" HDD



The DMS 2400 (MK4) appliance combines the recording software SeMSy® Recording Server with reliable and compact server hardware. Well-matched components ensure high storage speed and allow recording of up to 40 high-resolution video streams at a frame rate of 30 fps. This makes the appliance ideally suited for video security systems in stores, gas stations or private homes that require the highest recording quality in a small footprint.

Storage System

The DMS 2400 (MK4) has two lockable bays for 3.5" hard disk drives on the rear side, which are used for recording the video streams and storing the EdgeAnalytics data. The compartmentalized Linux operating system and the SeMSy® Recording Server application are installed on a separate flash module. Equipped with two of the optionally offered 22TB server hard disks, a storage capacity of 44TB is available.

SeMSy® Compact

SeMSy® Compact allows independent and convenient evaluation of the recordings over the network. The software can be installed on workstations with Windows operating system and adjusted individually. Two licenses for access with clients are already included in the scope of delivery of the appliance.

PRemote-HD

The optional PRemote-HD function transcodes high-definition video streams (live and playback) for transmission in low-bandwidth networks. This allows the resource-conserving access with SeMSy® Compact or a SeMSy® Workstation which is independent of the recording settings. This license also enables mobile access to transcoded video streams with SeMSy® Mobile Client.

EdgeAnalytics Database

The appliance is equipped with a database for the analysis results of Dallmeier cameras and Panomera® systems with EdgeAnalytics technology. The received events, objects and classes are stored with the relevant metadata almost in real time. For targeted search and evaluation, SeMSy® Compact is available with the SmartFinder function.

SmartBackfill

Dallmeier cameras are equipped with RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill feature ensures fast transfer to the SeMSy® recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

Recording of 3rd party cameras

The pre-installed SeMSy® Recording Server software is designed as an open platform. Together with the according licenses, third-party cameras can be recorded with motion detection and configured over the ONVIF protocol.

Recording of Panomera® cameras

For the recording of a Panomera® multifocal sensor system, only one licensed recording channel is required for the first sensor. For all other Panomera® sensors, only free channels must be available, but these do not need to be licensed for recording.

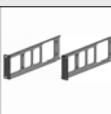
Features Hardware

- Compact server hardware
- Flash module for operating system and application
- Two lockable 3.5" HDD bays on the rear side
- Efficient system with low power consumption

Features SeMSy® Recording Server

- Recording of up to 40 high-resolution video streams
- Licenses for the recording of 8 video streams included
- Licenses for access with two SeMSy® Compact clients included
- Licenses for the update of the software for 12 months included
- Cameras with ONVIF Profile M, S and T supported
- Mobile access with SeMSy® Mobile Client supported
- Evaluation with SeMSy® Compact/Workstation over WAN/LAN
- GDPR-compliant functions for data protection and data security

SeMSy® Recording Server, stand-alone, recording of up to 40× video streams (8× included), total bit rate up to 160 Mbps, RAID 1 optional, storage system with up to 2× 3.5" HDD

Appliance		
	009352.401	DMS 2400 SeMSy® Recording Server, stand-alone, recording of up to 40× video streams (8× included), total bit rate up to 160 Mbps, RAID 1 optional, storage system with up to 2× 3.5" HDD, variant without HDD
Hard Disk Drive		
	000178	Mounting of a HDD Mounting of a HDD, including functional, long-term and final test, acceptance and approval
	007521	HDD 2000 GB, SATA, 3.5"
	007305	HDD 4000 GB, SATA, 3.5"
	009156	HDD 6000 GB, SATA, 3.5"
	007914	HDD 8000 GB, SATA, 3.5"
	008997	HDD 10000 GB, SATA, 3.5"
	009023	HDD 12000 GB, SATA, 3.5"
	009174	HDD 14000 GB, SATA, 3.5"
	008183	HDD 16000 GB, SATA, 3.5"
	008055	HDD 18000 GB, SATA, 3.5"
	009141	HDD 20000 GB, SATA, 3.5"
	009000	HDD 22000 GB, SATA, 3.5"
	009146	HDD 24000 GB, SATA, 3.5"
Network Contacts		
	005142	DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)
	001739	Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contacts, 6× relays (MOXA ioLogik E1214)
DNI Interface		
	007522	USB to Serial Adapter Programmed and certified adapter cable for the connection of a Dallmeier DNI interface to a VideoNetBox or to a DMS 2400, USB 2.0 type A, RS232 D-Sub 9 pins, length 1m
Bracket		
	000005	Bracket 19 Inch Rack (2 RU) Bracket for mounting the device in a 19" rack

SeMSy® Recording Server, stand-alone, recording of up to 40× video streams (8× included), total bit rate up to 160 Mbps, RAID 1 optional, storage system with up to 2× 3.5" HDD

Included Licenses	
DLC - 8 Recording Channels	License for the recording of eight high-definition video streams
DLC - 2 Client Access	License for simultaneous access of two SeMSy® Compact Clients with basic functions to SeMSy® Recording Server (floating license)
DLC - SEDOR® Camera Sabotage Protection	License for detection and reporting of covering, defocusing and twisting of cameras
DLC - SmartBackfill	License for the storage of video streams that have been buffered by Dallmeier cameras with EdgeStorage (not available in combination with DLC - Bank Package and for cameras with recording mode Contact)
DLC - SNMP	License for the integration into a central SNMP device management system
DLC - SeMSy® III and 5 Flat	License for integration into a SeMSy® III or HEMISPHERE® SeMSy® 5 Video Management System
DLC - Multicast Streaming	License for the transmission of video streams via multicast in a SeMSy® Video Management System
DLC - Multicast Recording	License for the recording of video streams of Dallmeier cameras using multicast transmission
DLC - Real-Time Recording	License for real-time recording for all video streams (depending on the camera)
DLC - LocalViewing	License for the use of the integrated video player for the local playback of one camera and the local live display of several cameras in a multi-split
DLC - Data Protection and Data Security	Basic license for use of the integrated data protection and data security module (GDPR-compliant)
Included Support and License Interval	
DMS 2400 Support and License Interval Basic	License for the use of the support services and functions of the Support Level Basic for 60 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ¹⁾ for 12 months. Bring-in warranty for 24 months.
Optional Support and License Interval	
009442 DMS 2400 MK4 Support and License Interval Premium (Plus 12 Months)	License for the use of the support services and functions of the Support Level Premium for 12 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. ²⁾ License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. ²⁾ License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ¹⁾ for 12 months.
009443 DMS 2400 MK4 Support and License Interval Premium and Warranty (Total of 60 Months)³⁾	License for the use of the support services and functions of the Support Level Premium for 60 months. Unlimited license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients. Unlimited license for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ¹⁾ for 60 months. Extension of the bring-in warranty (without hard disk drives) from 24 months to a total of 60 months.

1) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire term of the software maintenance.
 2) After a gap-free Premium licensing period of 60 months, the comfort functions and extensions can be used with SeMSy® Compact Clients for an unlimited period of time.
 3) Ordering recommended ex works. Subsequently orderable within the included bring-in warranty of 24 months.

SeMSy® Recording Server, stand-alone, recording of up to 40× video streams (8× included), total bit rate up to 160 Mbps, RAID 1 optional, storage system with up to 2× 3.5" HDD

Optional Licenses (Access)	
003782	DLC - 1 Additional Client Access License for the use of simultaneous access with basic functions by an additional SeMSy® Compact client to SeMSy® Recording Server (floating license)
004068	DLC - 5 Additional Client Access License for the use of simultaneous access with basic functions by five additional SeMSy® Compact clients to SeMSy® Recording Server (floating license)
004069	DLC - 10+ Additional Client Access (unlimited) License for the use of simultaneous access with basic functions by an unlimited number of SeMSy® Compact clients to SeMSy® Recording Server, depending on system load and bandwidth (floating license)
Optional Licenses (Channels)	
009437	DLC - 1 Additional Recording Channel (DMS MK4, IPS MK3) License for the use of an additional channel for the recording of the video stream from a Dallmeier camera
009439	DLC - 3rd Party Package for 1 Recording Channel (DMS MK4, IPS MK3) Upgrade license for the use of an existing channel for the recording (permanent, contact triggered or with motion detection) of the video stream from a 3rd party camera
Optional Licenses (Functions)	
007923	DLC - RAID 1 Recording (DMS) License for recording with RAID 1 in connection with two identical hard disks (HDDs)
003801	DLC - PRemote-HD License for the transmission of SD and HD video with low bandwidth, including a dedicated access license ⁴⁾ and the function for accessing transcoded video streams with SeMSy® Mobile Client
004685	DLC - LAN Interface for Data Reception License for the reception of data from third-party systems (AWEK POS systems and NPC II protocol converters) over the network interface, including linking, storage and display of the data with the video recordings
006293	DLC - High-Speed Recording >30 fps License for the recording of Dallmeier cameras with a frame rate of more than 30 fps
007642	DLC - ViProxy Plus (DMS) License for the use of the second network interface in conjunction with one of the functions ViProxy (physically separated network for cameras, WebConfig Routing included), Link Redundancy (redundant connection of the appliance to two switches) or Data Throughput (bundling of both network interfaces to a channel with double data throughput)
007569	DLC - Bank Package (VNB III, VNB MK4, DMS MK4)⁵⁾ License for the use of the module for recording according to DGUV Test, including ATM activity monitoring (USB to Serial Adapter (007522) required) and reference image delivery via e-mail

4) The first PRemote client (master) is assigned active control over the PRemote stream; further PRemote clients (slaves) receive the stream passively.

5) Function in preparation

SeMSy® Recording Server, stand-alone, recording of up to 40× video streams (8× included), total bit rate up to 160 Mbps, RAID 1 optional, storage system with up to 2× 3.5" HDD

Optional Licenses (Extensions SeMSy® Compact)	
007238	DLC - SC AutoTracking for Single Sensor Camera License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Dallmeier camera with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007239	DLC - SC AutoTracking for Panomera® S/W 4 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 4 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007237	DLC - SC AutoTracking for Panomera® S/W 8 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 8 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007092	DLC - SC Dashboard Support License for the use of the SeMSy® Compact Dashboard function (graphical display of the analysis data Line Crossing, Intrusion Detection and Object Counting including object types), only in connection with Dallmeier cameras and Panomera® systems with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance

Notes

[illegible]

SeMSy® Recording Server, stand-alone, recording of up to 16x video streams (2x included), total bit rate up to 140 Mbps, SSD RAID 1 optional, storage system with up to 2x 2.5" SSD/HDD



The VideoNetBox (MK4) combines the SeMSy® Recording Server software with compact, fanless and energy-efficient server hardware. Optimally matched components ensure excellent passive cooling and enable the recording of up to 16 high-resolution video streams with a frame rate of 30 fps. This makes the appliance ideal for video security systems in stores, petrol stations or private homes where the highest recording quality is required in the smallest possible space and without noise.

Storage System

The VideoNetBox (MK4) has two lockable bays for 2.5" hard disk drives on the front side, which are used for recording the video streams and storing the EdgeAnalytics data. The hardened Linux operating system and the SeMSy® Recording Server application are installed on a separate flash module. Equipped with two of the optionally offered 4TB SSDs, a storage capacity of 8TB is available.

SeMSy® Compact

SeMSy® Compact allows independent and convenient evaluation of the recordings over the network. The software can be installed on workstations with Windows operating system and adjusted individually. Two licenses for access with clients are already included in the scope of delivery of the appliance.

PRemote-HD

The optional PRemote-HD function transcodes high-definition video streams (live and playback) for transmission in low-bandwidth networks. This allows the resource-conserving access with SeMSy® Compact or a SeMSy® Workstation which is independent of the recording settings. This license also enables mobile access to transcoded video streams with SeMSy® Mobile Client.

EdgeAnalytics Database

The appliance is equipped with a database for the analysis results of Dallmeier cameras and Panomera® systems with EdgeAnalytics technology. The received events, objects and classes are stored with the relevant metadata almost in real time. For targeted search and evaluation, SeMSy® Compact is available with the SmartFinder function.

SmartBackfill

Dallmeier cameras are equipped with RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill feature ensures fast transfer to the SeMSy® recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

Recording of 3rd party cameras

The pre-installed SeMSy® Recording Server software is designed as an open platform. Together with the according licenses, third-party cameras can be recorded with motion detection and configured over the ONVIF protocol.

Recording of Panomera® cameras

For the recording of a Panomera® multifocal sensor system, only one licensed recording channel is required for the first sensor. For all other Panomera® sensors, only free channels must be available, but these do not need to be licensed for recording.

Features Hardware

- Compact and fanless server hardware
- Passive cooling over aluminium housing
- Flash module for operating system and application
- Two lockable HDD bays on the front side
- Highly efficient system with low power consumption
- Mounting rails and power supply included in delivery

Features SeMSy® Recording Server

- Recording of up to 16 high-resolution video streams
- Licenses for the recording of two video streams included
- Licenses for access with two SeMSy® Compact clients included
- Licenses for the update of the software for 12 months included
- Cameras with ONVIF Profile M, S and T supported
- Direct evaluation with LocalViewing optional
- Mobile access with SeMSy® Mobile Client supported
- Evaluation with SeMSy® Compact/Workstation over WAN/LAN
- GDPR-compliant functions for data protection and data security

SeMSy® Recording Server, stand-alone, recording of up to 16× video streams (2× included), total bit rate up to 140 Mbps, SSD RAID 1 optional, storage system with up to 2× 2.5" SSD/HDD

Appliance		
	009353.401	VideoNetBox SeMSy® Recording Server, stand-alone, recording of up to 16× video streams (2× included), total bit rate up to 140 Mbps, SSD RAID 1 optional, storage system with up to 2× 2.5" SSD/HDD, variant without SSD/HDD
Hard Disk Drive		
	000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	006248	HDD 2000 GB, SATA, 2.5"
	008601	SSD 960 GB, SATA, 2.5"
	009297	SSD 2000 GB, SATA, 2.5"
	009296	SSD 4000 GB, SATA, 2.5"
Network Contacts		
	005142	DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)
	001739	Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contact, 6× relay (MOXA ioLogik E1214)
DNI Interface		
	007522	USB to Serial Adapter Programmed and certified adapter cable for the connection of a Dallmeier DNI interface to a VideoNetBox or to a DMS 2400, USB 2.0 type A, RS232 D-Sub 9 pins, length 1m

SeMSy® Recording Server, stand-alone, recording of up to 16× video streams (2× included),
total bit rate up to 140 Mbps, SSD RAID 1 optional, storage system with up to 2× 2.5" SSD/HDD

Included Licenses
DLC - 2 Recording Channels License for the recording of two high-definition video streams
DLC - 2 Client Access License for simultaneous access of two SeMSy® Compact Clients with basic functions to SeMSy® Recording Server (floating license)
DLC - SmartBackfill License for the storage of video streams that have been buffered by Dallmeier cameras with EdgeStorage (not available in combination with DLC - Bank Package and for cameras with recording mode Contact)
DLC - SNMP License for the integration into a central SNMP device management system
DLC - Multicast Streaming License for the transmission of video streams via multicast in a SeMSy® video management system
DLC - Multicast Recording License for the recording of video streams of Dallmeier cameras using multicast transmission
DLC - Real-Time Recording License for real-time recording for all video streams (depending on the camera)
DLC - Data Protection and Data Security Basic license for use of the integrated data protection and data security module (GDPR-compliant)
Included Support and License Interval
VNB Support and License Interval Basic License for the use of the support services and functions of the Support Level Basic for 60 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ¹⁾ for 12 months. Bring-in warranty for 24 months.
Optional Support and License Interval
009367 VNB MK4, SRS Edge MK2 Support and License Interval Premium (Plus 12 Months) License for the use of the support services and functions of the Support Level Premium for 12 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. ²⁾ License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. ²⁾ License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ¹⁾ for 12 months.
009368 VNB MK4, SRS Edge MK2 Support and License Interval Premium and Warranty (Total of 60 Months)³⁾ License for the use of the support services and functions of the Support Level Premium for 60 months. Unlimited license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients. Unlimited license for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ¹⁾ for 60 months. Extension of the bring-in warranty (without hard disk drives) from 24 months to a total of 60 months.

1) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire term of the software maintenance.
2) After a gap-free Premium licensing period of 60 months, the comfort functions and extensions can be used with SeMSy® Compact Clients for an unlimited period of time.
3) Ordering recommended ex works. Subsequently orderable within the included bring-in warranty of 24 months.

SeMSy® Recording Server, stand-alone, recording of up to 16× video streams (2× included), total bit rate up to 140 Mbps, SSD RAID 1 optional, storage system with up to 2× 2.5" SSD/HDD

Optional Licenses (Access)	
006770	DLC - 1 Additional Client Access (VNB) License for the use of simultaneous access with basic functions by an additional SeMSy® Compact client to SeMSy® Recording Server (floating license)
006771	DLC - 5 Additional Client Access (VNB) License for the use of simultaneous access with basic functions by five additional SeMSy® Compact clients to SeMSy® Recording Server (floating license)
006772	DLC - 10+ Additional Client Access (unlimited, VNB) License for the use of simultaneous access with basic functions by an unlimited number of SeMSy® Compact clients to SeMSy® Recording Server, depending on system load and bandwidth (floating license)
Optional Licenses (Channels)	
009440	DLC - 1 Additional Recording Channel (VNB MK4, SRS Edge MK2) License for the use of an additional channel for the recording of the video stream from a Dallmeier camera
009441	DLC - 3rd Party Package for 1 Recording Channel (VNB MK4, SRS Edge MK2) Upgrade license for the use of an existing channel for the recording (permanent, contact triggered or with motion detection) of the video stream from a 3rd party camera
Optional Licenses (Functions)	
006779	DLC - RAID 1 Recording (VNB)⁴⁾ License for the recording with RAID 1 in combination with two identical Solid State Disks (SSDs)
006775	DLC - PRemote-HD (VNB) License for the transmission of SD and HD video with low bandwidth, including a dedicated access license ⁵⁾ and the function for accessing transcoded video streams with SeMSy® Mobile Client
006777	DLC - SEDOR® Camera Sabotage Protection (VNB) License for the detection and reporting of covering, defocusing and twisting of cameras
006778	DLC - LAN Interface for Data Reception (VNB) License for the reception of the data from third-party systems (AWEK cash desk systems and NPC II protocol converter) over the network interface. Linking, storing and displaying the data with the video recordings included
006780	DLC - High-Speed Recording >30 fps (VNB) License for the recording of Dallmeier cameras with a frame rate of more than 30 fps
006894	DLC - LocalViewing (VNB) License for the use of the integrated video player for the local playback of one camera and the local live display of several cameras in a multi-split
006895	DLC - ViProxy Plus (VNB) License for the use of the second network interface in conjunction with one of the functions ViProxy (physically separated network for cameras, WebConfig Routing included), Link Redundancy (redundant connection of the appliance to two switches) or Data Throughput (bundling of both network interfaces to a channel with double data throughput)
007569	DLC - Bank Package (VNB III, VNB MK4, DMS MK4)⁶⁾ License for the use of the module for recording according to DGUV Test, including ATM activity monitoring (USB to Serial Adapter (007522) required) and reference image delivery via email

4) The RAID 1 function cannot be offered in conjunction with Hard Disk Drives (HDDs) for performance reasons.

5) The first PRemote client (master) is assigned active control over the PRemote stream; further PRemote clients (slaves) receive the stream passively.

6) Function in preparation

SeMSy® Recording Server, stand-alone, recording of up to 16× video streams (2× included), total bit rate up to 140 Mbps, SSD RAID 1 optional, storage system with up to 2× 2.5" SSD/HDD

Optional Licenses (Extensions SeMSy® Compact)	
007238	DLC - SC AutoTracking for Single Sensor Camera License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Dallmeier camera with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007239	DLC - SC AutoTracking for Panomera® S/W 4 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 4 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007237	DLC - SC AutoTracking for Panomera® S/W 8 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 8 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007092	DLC - SC Dashboard Support License for the use of the SeMSy® Compact Dashboard function (graphical display of the analysis data Line Crossing, Intrusion Detection and Object Counting including object types), only in connection with Dallmeier cameras and Panomera® systems with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SeMSy® Recording Server, stand-alone, recording of up to 16x video streams (1x included), total bit rate up to 140 Mbps, fanless, energy efficient, 2TB or 4TB M.2 NVMe SSD



The SRS Edge (MK2) is designed as an appliance for decentralized and bandwidth-saving use in close proximity to the cameras. It combines the recording software SeMSy® Recording Server with an ultra-compact, fanless, energy efficient and robust server hardware. Perfectly tuned components ensure excellent passive cooling and allow for the recording of up to 16 high-definition video streams at a frame rate of 30 fps.

Storage System

The SRS Edge (MK2) is equipped ex works with a highly efficient and solidly installed SSD memory. This allows high storage speeds even in the elevated temperature range and is used exclusively for recording. The hardened Linux operating system and the SeMSy® Recording Server application are installed on a separate flash module.

SeMSy® Compact

SeMSy® Compact allows independent and convenient evaluation of the recordings over the network. The software can be installed on workstations with Windows operating system and adjusted individually. Two licenses for access with clients are already included in the scope of delivery of the appliance.

PRemote-HD

The optional PRemote-HD function transcodes high-definition video streams (live and playback) for transmission in low-bandwidth networks. This allows the resource-conserving access with SeMSy® Compact or a SeMSy® Workstation which is independent of the recording settings. This license also enables mobile access to transcoded video streams with SeMSy® Mobile Client.

EdgeAnalytics Database

The appliance is equipped with a database for the analysis results of Dallmeier cameras and Panomera® systems with EdgeAnalytics technology. The received events, objects and classes are stored with the relevant metadata almost in real time. For targeted search and evaluation, SeMSy® Compact is available with the SmartFinder function.

SmartBackfill

Dallmeier cameras are equipped with RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill feature ensures fast transfer to the Dallmeier recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

Recording of 3rd party cameras

The pre-installed SeMSy® Recording Server software is designed as an open platform. Together with the according licenses, third-party cameras can be recorded with motion detection and configured over the ONVIF protocol.

Recording of Panomera® cameras

For the recording of a Panomera® multifocal sensor system, only one licensed recording channel is required for the first sensor. For all other Panomera® sensors, only free channels must be available, but these do not need to be licensed for recording.

Features Hardware

- Compact and fanless server hardware
- Extended temperature range -30°C to +65°C
- Passive cooling over aluminium housing
- Flash module for operating system and application
- Highly efficient system with low power consumption
- Mounting rails and power supply included in delivery

Features SeMSy® Recording Server

- Recording of up to 16 high-definition video streams
- License for the recording of one video streams included
- Licenses for access with two SeMSy® Compact clients included
- Licenses for the update of the software for 12 months included
- Cameras with ONVIF Profile M, S and T supported
- Direct evaluation with LocalViewing optional
- Mobile access with SeMSy® Mobile Client supported
- Evaluation with SeMSy® Compact/Workstation over WAN/LAN
- GDPR-compliant functions for data protection and data security

SeMSy® Recording Server, stand-alone, recording of up to 16× video streams (1× included), total bit rate up to 140 Mbps, fanless, energy efficient, 2 TB or 4 TB M.2 NVMe SSD

Appliance		
	009445	SRS Edge SeMSy® Recording Server, stand-alone, recording of up to 16× video streams (1× included), total bit rate up to 140 Mbps, fanless, energy efficient, PSU included, without SSD memory module ¹⁾
Option Memory		
	007751	M.2 NVMe Module 2 TB Dallmeier certified 2 TB M.2 NVMe SSD memory module, including installation, functional, long-term and final test, acceptance and approval
	009068	M.2 NVMe Module 4 TB Dallmeier certified 4 TB M.2 NVMe SSD memory module, including installation, functional, long-term and final test, acceptance and approval
Option Network Contacts		
	005142	DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)
	001739	Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contact, 6× relay (MOXA ioLogik E1214)
Included Licenses		
DLC - 2 Recording Channels License for the recording of two high-definition video streams		
DLC - 2 Client Access License for simultaneous access of two SeMSy® Compact Clients with basic functions to SeMSy® Recording Server (floating license)		
DLC - SmartBackfill License for the storage of video streams that have been buffered by Dallmeier cameras with EdgeStorage (not available in combination with DLC - Bank Package and for cameras with recording mode Contact)		
DLC - SNMP License for the integration into a central SNMP device management system		
DLC - Multicast Streaming License for the transmission of video streams via multicast in a SeMSy® video management system		
DLC - Multicast Recording License for the recording of video streams of Dallmeier cameras using multicast transmission		
DLC - Real-Time Recording License for real-time recording for all video streams (depending on the camera)		
DLC - Data Protection and Data Security Basic license for use of the integrated data protection and data security module (GDPR-compliant)		
Included Support and License Interval		
VNB Support and License Interval Basic License for the use of the support services and functions of the Support Level Basic for 60 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates for 12 months. Bring-in warranty for 24 months.		

1) The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

SeMSy® Recording Server, stand-alone, recording of up to 16x video streams (1x included), total bit rate up to 140 Mbps, fanless, energy efficient, 2 TB or 4 TB M.2 NVMe SSD

Optional Support and License Interval	
009367	VNB MK4, SRS Edge MK2 Support and License Interval Premium (Plus 12 Months) License for the use of the support services and functions of the Support Level Premium for 12 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. ³⁾ License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. ³⁾ License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 12 months.
009368	VNB MK4, SRS Edge MK2 Support and License Interval Premium and Warranty (Total of 60 Months)⁴⁾ License for the use of the support services and functions of the Support Level Premium for 60 months. Unlimited license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients. Unlimited license for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 60 months. Extension of the bring-in warranty (without hard disk drives) from 24 months to a total of 60 months.
Optional Licenses (Access)	
007550	DLC - 1 Additional Client Access (SRS Edge) License for the use of simultaneous access with basic functions by an additional SeMSy® Compact client to SeMSy® Recording Server (floating license)
007551	DLC - 5 Additional Client Access (SRS Edge) License for the use of simultaneous access with basic functions by five additional SeMSy® Compact clients to SeMSy® Recording Server (floating license)
007552	DLC - 10+ Additional Client Access (unlimited, SRS Edge) License for the use of simultaneous access with basic functions by an unlimited number of SeMSy® Compact clients to SeMSy® Recording Server, depending on system load and bandwidth (floating license)
Optional Licenses (Channels)	
009440	DLC - 1 Additional Recording Channel (VNB MK4, SRS Edge MK2) License for the use of an additional channel for the recording of the video stream from a Dallmeier camera
009441	DLC - 3rd Party Package for 1 Recording Channel (VNB MK4, SRS Edge MK2) Upgrade license for the use of an existing channel for the recording (permanent, contact triggered or with motion detection) of the video stream from a 3rd party camera
Optional Licenses (Functions)	
007555	DLC - PRemote-HD (SRS Edge) License for the transmission of SD and HD video with low bandwidth, including a dedicated access license ⁵⁾ and the function for accessing transcoded video streams with SeMSy® Mobile Client
007556	DLC - SEDOR® Camera Sabotage Protection (SRS Edge) License for the detection and reporting of covering, defocusing and twisting of cameras
007557	DLC - LAN Interface for Data Reception (SRS Edge) License for the reception of the data from third-party systems (AWEK cash desk systems and NPC II protocol converter) over the network interface. Linking, storing and displaying the data with the video recordings included
007558	DLC - High-Speed Recording >30 fps (SRS Edge) License for the recording of Dallmeier cameras with a frame rate of more than 30 fps
007559	DLC - LocalViewing (SRS Edge) License for direct evaluation on a connected monitor with playback of one camera and live display of several cameras (multi-split)
007560	DLC - ViProxy Plus (SRS Edge) License for the use of the second network interface in conjunction with one of the functions ViProxy (physically separated network for cameras, WebConfig Routing included), Link Redundancy (redundant connection of the appliance to two switches) or Data Throughput (bundling of both network interfaces to a channel with double data throughput)

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire term of the software maintenance.
3) After a gap-free Premium licensing period of 60 months, the comfort functions and extensions can be used with SeMSy® Compact Clients for an unlimited period of time.
4) Ordering recommended ex works. Subsequently orderable within the included bring-in warranty of 24 months.
5) The first PRemote client (master) is assigned active control over the PRemote stream; further PRemote clients (slaves) receive the stream passively.

Notes

This image shows a full page of blank, lined paper. It features approximately 28 horizontal grey lines spaced evenly apart, typical of standard notebook paper. The lines extend across the entire width of the page, leaving small margins at the top and bottom. There are no vertical lines, text, or other markings present.

Mountera® Box with SRS Edge

MK2

Mountera Box® with SeMSy® Recording Server, recording of up to 16× video streams (1× included), total bit rate up to 140 Mbps, fanless, energy efficient, 2TB or 4TB M.2 NVMe SSD



The Mountera® Box with SRS Edge (MK2) combines the robust box of the innovative Mountera® Quick-Lock System with a SeMSy® Recording Server Appliance. The fanless and energy efficient server hardware offers excellent passive cooling and allows recording of up to 16 high-resolution video streams at a frame rate of 30 fps.

Panomera®

The Mountera® Box with SRS Edge has been especially developed for the decentralized and bandwidth-saving use in close proximity to Panomera® multifocal sensor systems. All Panomera® video streams are stored locally and directly. The access for live viewing and playback over the network is uniformly established via SeMSy® Recording Server. Two licenses for access with clients are already included in the scope of delivery of the appliance.

Panomera® License

The license for the recording of the first Panomera® sensor is already included in the scope of delivery. For all other Panomera® sensors, only free channels must be available, but these do not need to be licensed for recording.

Storage System

The Mountera® Box with SRS Edge is equipped ex works with a highly efficient and solidly installed SSD memory. This allows high storage speeds even in the elevated temperature range and is used exclusively for recording. The hardened Linux operating system and the SeMSy® Recording Server application are installed on a separate flash module.

PRemote-HD

The optional PRemote-HD function transcodes high-definition video streams (live and playback) for transmission in low-bandwidth networks. This allows the resource-conserving access with SeMSy® Compact or a SeMSy® Workstation which is independent of the recording settings. This license also enables mobile access to transcoded video streams with SeMSy® Mobile Client.

EdgeAnalytics Database

The appliance is equipped with a database for the analysis results of Dallmeier cameras and Panomera® systems with EdgeAnalytics technology. The received events, objects and classes are stored with the relevant metadata almost in real time. For targeted search and evaluation, SeMSy® Compact is available with the SmartFinder function.

SmartBackfill

Dallmeier cameras are equipped with RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill feature ensures fast transfer to the Dallmeier recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

Features Hardware

- Compact and fanless server hardware
- Passive cooling over aluminium housing
- Flash module for operating system and application
- Highly efficient system with low power consumption
- Cover secured with alarm contact
- Robust 260 W power supply included
- Adapter for Mountera® Ceiling Bracket optional
- Adapter for mounting on a pole optional

Features SeMSy® Recording Server

- Recording of up to 16 high-resolution video streams
- License for the recording of one video stream included
- Licenses for access with two SeMSy® Compact clients included
- Licenses for the update of the software for 12 months included
- Mobile access with SeMSy® Mobile Client supported
- Evaluation with SeMSy® Compact/Workstation over WAN/LAN
- GDPR-compliant functions for data protection and data security

Mountera Box® with SeMSy® Recording Server, recording of up to 16× video streams (1× included), total bit rate up to 140 Mbps, fanless, energy efficient, 2 TB or 4 TB M.2 NVMe SSD

Appliance		
	009446	Mountera® Box with SRS Edge Mountera Box® with SeMSy® Recording Server, recording of up to 16× video streams (1× included), total bit rate up to 140 Mbps, fanless, energy efficient, power supply unit 48V DC, 5.4 A, 260 W included, IP69, white, without SSD memory module ¹⁾
Option Memory		
	007751	SSD M.2 NVMe Module 2TB Dallmeier certified 2 TB M.2 NVMe SSD memory module, including installation, functional, long-term and final test, acceptance and approval
	009068	SSD M.2 NVMe Module 4TB Dallmeier certified 4 TB M.2 NVMe SSD memory module, including installation, functional, long-term and final test, acceptance and approval
Bracket		
	006979	Mountera® Wall Bracket Mountera® bracket for the installation of camera systems on walls or on a Mountera® Box, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, white
	006980	Mountera® Ceiling Bracket Mountera® bracket for installation of camera systems on ceilings, Quick-Lock System included, robust aluminium construction, internal cable routing, vandal-resistant, powder-coated, height 150 mm, white
Adapter		
	009108	Mountera® Ceiling Bracket Box Adapter Adapter for the modification of a Mountera® Ceiling Bracket for mounting on a Mountera® Box, 4× self-locking screws (microencapsulated), powder-coated, white
	009109	Mountera® Box Pole Adapter Adapter for installing a Mountera® Box on poles with a diameter of 100 – 300 mm, 4× self-locking screws (micro-encapsulated), without band clamps, powder-coated, white
Cable Set		
	007428	Mountera® Cable Set C Preassembled cable set for the connection of a camera system to a Mountera® Box, 1× cable seal, 1× cable power supply/grounding, 1× cable network (copper RJ45), each with matching plug, UV-resistant and flexible, length 80 cm

1) The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

Mountera Box® with SeMSy® Recording Server, recording of up to 16× video streams (1× included), total bit rate up to 140 Mbps, fanless, energy efficient, 2 TB or 4 TB M.2 NVMe SSD

Included Licenses	
DLC - 2 Recording Channels	License for the recording of two high-definition video streams
DLC - 2 Client Access	License for simultaneous access of two SeMSy® Compact Clients with basic functions to SeMSy® Recording Server (floating license)
DLC - SmartBackfill	License for the storage of video streams that have been buffered by Dallmeier cameras with EdgeStorage (not available in combination with DLC - Bank Package and for cameras with recording mode Contact)
DLC - SNMP	License for the integration into a central SNMP device management system
DLC - Multicast Streaming	License for the transmission of video streams via multicast in a SeMSy® video management system
DLC - Multicast Recording	License for the recording of video streams of Dallmeier cameras using multicast transmission
DLC - Real-Time Recording	License for real-time recording for all video streams (depending on the camera)
DLC - ViProxy Plus (VNB)	License for the use of the second network interface in conjunction with one of the functions ViProxy (physically separated network for cameras, WebConfig Routing included), Link Redundancy (redundant connection of the appliance to two switches) or Data Throughput (bundling of both network interfaces to a channel with double data throughput)
DLC - Data Protection and Data Security	Basic license for use of the integrated data protection and data security module (GDPR-compliant)
Included Support and License Interval	
VNB Support and License Interval Basic	License for the use of the support services and functions of the Support Level Basic for 60 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 12 months. Bring-in warranty for 24 months.
Optional Support and License Interval	
009367 VNB MK4, SRS Edge MK2 Support and License Interval Premium (Plus 12 Months)	License for the use of the support services and functions of the Support Level Premium for 12 months. License for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months. ³⁾ License for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients for 12 months. ³⁾ License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 12 months.
009368 VNB MK4, SRS Edge MK2 Support and License Interval Premium and Warranty (Total of 60 Months)⁴⁾	License for the use of the support services and functions of the Support Level Premium for 60 months. Unlimited license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients. Unlimited license for the use of the extensions AutoTracking and Dashboard (separate license required) with SeMSy® Compact Clients. License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ²⁾ for 60 months. Extension of the bring-in warranty (without hard disk drives) from 24 months to a total of 60 months.
Optional Licenses (Access)	
007550 DLC - 1 Additional Client Access (SRS Edge)	License for the use of simultaneous access with basic functions by an additional SeMSy® Compact client to SeMSy® Recording Server (floating license)
007551 DLC - 5 Additional Client Access (SRS Edge)	License for the use of simultaneous access with basic functions by five additional SeMSy® Compact clients to SeMSy® Recording Server (floating license)
007552 DLC - 10+ Additional Client Access (unlimited, SRS Edge)	License for the use of simultaneous access with basic functions by an unlimited number of SeMSy® Compact clients to SeMSy® Recording Server, depending on system load and bandwidth (floating license)

2) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire term of the software maintenance.
3) After a gap-free Premium licensing period of 60 months, the comfort functions and extensions can be used with SeMSy® Compact Clients for an unlimited period of time.
4) Ordering recommended ex works. Subsequently orderable within the included bring-in warranty of 24 months.

Mountera Box® with SeMSy® Recording Server, recording of up to 16× video streams (1× included), total bit rate up to 140 Mbps, fanless, energy efficient, 2 TB or 4 TB M.2 NVMe SSD

Optional Licenses (Channels)	
009440	DLC - 1 Additional Recording Channel (VNB MK4, SRS Edge MK2) License for the use of an additional channel for the recording of the video stream from a Dallmeier camera
009441	DLC - 3rd Party Package for 1 Recording Channel (VNB MK4, SRS Edge MK2) Upgrade license for the use of an existing channel for the recording (permanent, contact triggered or with motion detection) of the video stream from a 3rd party camera

Optional Licenses (Functions)	
007555	DLC - PRemote-HD (SRS Edge) License for the transmission of SD and HD video with low bandwidth, including a dedicated access license ⁵⁾ and the function for accessing transcoded video streams with SeMSy® Mobile Client

5) The first PRemote client (master) is assigned active control over the PRemote stream; further PRemote clients (slaves) receive the stream passively.

SeMSy® Recording Server VM 5

SeMSy® Recording Server software for virtual environments (Proxmox VE), recording of up to 240 video streams on two instances, ready-to-run image



SeMSy® Recording Server VM 5 is a high performance server software with a processing capacity for up to 120 video streams per instance. Designed for the operation as a virtual machine on server systems with a Proxmox¹⁾ VE hypervisor, SRS VM 5 can run in multiple instances in parallel.

Up to 240 Video Streams

SeMSy® Recording Server VM 5 can be licensed with up to 120 channels for recording from Dallmeier cameras or Panomera® systems. The server software can be operated twice as a virtual machine on one of the recommended Dallmeier Recording Appliances. This allows up to 240 video streams to be recorded on one server.

Linux Operating System

SeMSy® Recording Server VM 5 includes a specially adapted and low-maintenance Linux operating system. Due to fundamental adaptations and runtime optimizations for the special requirements of the SeMSy® recording system, it is considerably more powerful than comparable recording systems for Microsoft Windows²⁾ operating systems.

Ready-to-Run

SeMSy® Recording Server VM 5 is made available as a ready-to-run virtual appliance for systems with a Proxmox VE hypervisor. The package of application and operating system can be quickly and easily copied into an instance of the hypervisor and put into operation immediately. The relatively complex installation and customization on systems with Windows operating system is completely eliminated.

SeMSy® Integration

The server software is factory fitted with the SeMSy® Flat license. Thus, it is optimally equipped for integration into the storage system of a SeMSy® Video Management System. The server software supports the complete SeMSy® functional range including convenient evaluation of recordings on a SeMSy® Workstation.

SeMSy® Compact

SeMSy® Compact allows independent and convenient evaluation of the recordings over the network. The software can be installed on workstations with Windows operating system and adjusted individually. SeMSy® Recording Server VM 5 comes with unlimited licenses for access with clients.

EdgeAnalytics Database

SeMSy® Recording Server VM 5 is equipped with a database for the analysis results of Dallmeier cameras and Panomera® systems with EdgeAnalytics technology. The received events, objects and classes are stored with the relevant metadata almost in real-time. The Hemisphere® SeMSy® Workstation and SeMSy® Compact are available for targeted searches and evaluations.

SmartBackfill

Dallmeier cameras are equipped with a RAM memory that can be expanded with an SD card. This memory is used by the EdgeStorage function for buffering the video stream in the event of network failures (e.g. spanning tree, bursts). When the network is restored, the optional SmartBackfill feature ensures fast transfer to the SeMSy® recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

Recording of 3rd party cameras

SeMSy® Recording Server VM 5 is designed as an open platform. Together with the according licenses, third-party cameras can be recorded with motion detection and configured over the ONVIF protocol.

Recording of Panomera® cameras

For the recording of a Panomera® multifocal sensor system, only one licensed recording channel is required for the first sensor. For all other Panomera® sensors, only free channels must be available, but these do not need to be licensed for recording.

Features

- High performance server software
- Parallel operation on 2 instances with 120 channel licenses each
- Up to 240 channels supported on a powerful server system
- Licenses for the update of the software for 24 months included
- Hardened and low-maintenance Linux operating system included
- Ready-to-run package for Proxmox VE hypervisor

1) Proxmox is a registered trademark of Proxmox Server Solutions GmbH in the EU, the U.S. and other countries

2) Microsoft and Windows is a trademarks or registered trademarks of Microsoft Corporation headquartered in Redmond, Washington, USA

SeMSy® Recording Server VM 5

SeMSy® Recording Server software for virtual environments (Proxmox VE), recording of up to 240 video streams on two instances, ready-to-run image

Software	
009338	SeMSy® Recording Server VM 5 License for the operation of SeMSy® Recording Server VM 5 on two Proxmox VE instances, unlimited access licenses for SeMSy® Compact included, without channel licenses, ready-to run image, 1x Dallmeier License Dongle (Net 10)
009339	DLD - SeMSy® Recording Server VM 5 Extension of an existing SRS VM 5 dongle with a license for the operation of SeMSy® Recording Server VM 5 on two additional Proxmox VE instances, unlimited access licenses for SeMSy® Compact included, without channel licenses
Included Licenses	
DLC - 2 SRS VM 5 Instances License for the operation of SeMSy® Recording Server VM 5 on two Proxmox VE instances	
DLC - 10+ Additional Client Access (Unlimited) License for the simultaneous access of an unlimited number of SeMSy® Compact Clients, depending on system load and bandwidth (floating license)	
DLC - SEDOR® Camera Sabotage Protection License for the detection and reporting of covering, defocusing and twisting of cameras	
DLC - SNMP License for the integration into a central SNMP device management system	
DLC - SeMSy® Flat License for the integration into a SeMSy® Video Management System	
DLC - Multicast Streaming License for the transmission of video streams via multicast in a SeMSy® Video Management System	
DLC - Multicast Recording License for the recording of video streams of Dallmeier cameras using multicast transmission	
DLC - Real-Time Recording License for real-time recording for all video streams (depending on the camera)	
Optional Licenses	
009340	DLC - 1 Additional Recording Channel (SRS VM 5) License for the use of an additional channel for the recording of the video stream from a Dallmeier camera, valid for one instance of the SRS VM 5 server
009341	DLC - 3rd Party Package for 1 Recording Channel (SRS VM 5) Upgrade license for the use of an existing channel for the recording (permanent, contact triggered or with motion detection) of the video stream from a 3rd party cameras, valid for one instance of the SRS VM 5 server
Maintenance	
009343	DLD - SW Maintenance 12 Months (SRS VM 5) License for the update of operating system and SeMSy® Recording Server with updates, upgrades and security updates ³⁾ for 12 months, license for the use of the comfort functions Timeline, Interval Jumps and SmartFinder with SeMSy® Compact Clients for 12 months ⁴⁾ , 1x license for Dallmeier License Dongle, valid for all instance of the SRS VM 5 server

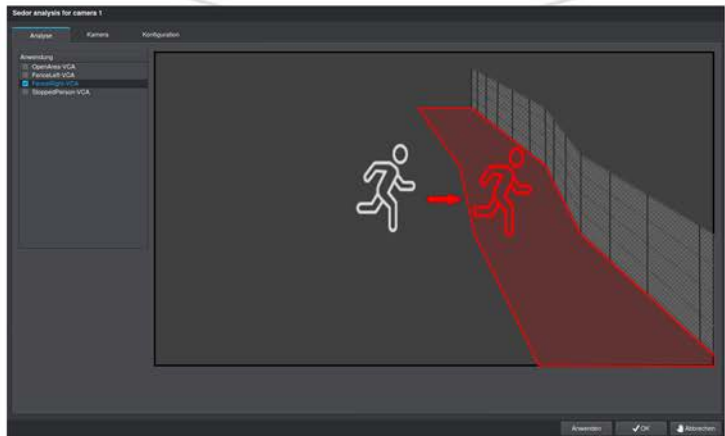
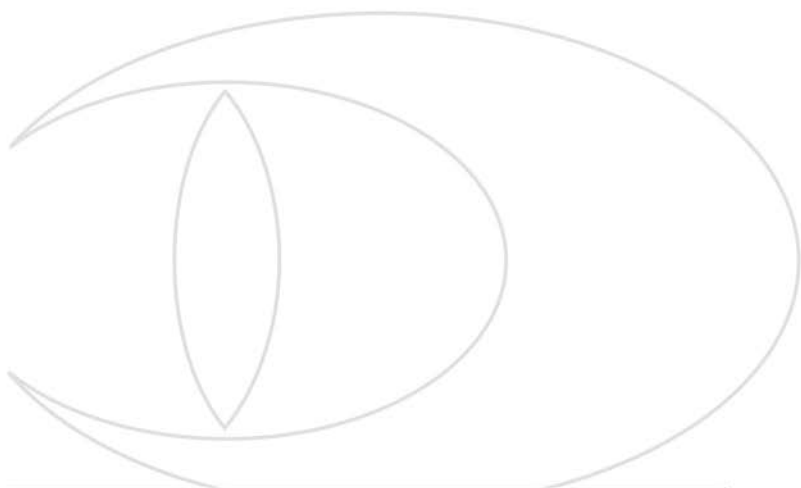
3) Security updates for relevant CVE vulnerabilities that become known will be provided (subject to technical feasibility) for the entire term of the software maintenance.

4) After a gap-free licensing period of 60 months, the comfort functions and extensions can be used with SeMSy® Compact Clients for an unlimited period of time.

Notes

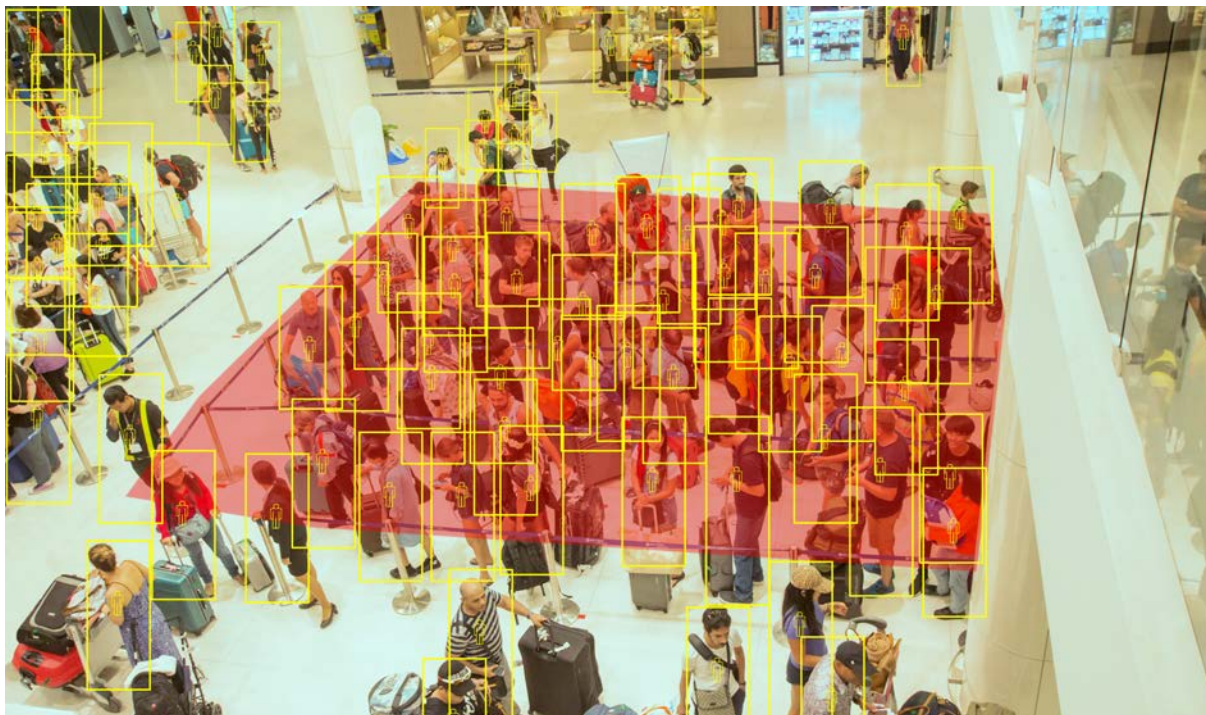
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

AI Video Analysis



AI High Resolution Counting App

EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports based on the AI High Resolution Counting neural network for object classification of persons and vehicles



The AI High Resolution Counting App and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds¹⁾. Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.

AI High Resolution Counting App

The AI High Resolution Counting App allows the definition of several counting zones and the setting of the counting interval for the neural network. A limit value for the counted objects can be defined for each zone, which triggers a message to the client software defined via the event management if it is exceeded or undershot.

AI High Resolution Counting Net

The AI High Resolution Counting neural network has been specially trained for object classification of people and vehicles that are simultaneously visible in large numbers and not isolated in the captured image. The neural network analyzes the high-resolution image in an adjustable interval (5 to 60 seconds) and makes the results available for direct evaluation with the AI High Resolution Counting App.

Compatibility

The AI High Resolution Counting App and the associated neural network can be used with all Domera® cameras of the RDF6000 series as well as with all Panomera® S/W 4 and 8 cameras.

Client Software

For small to medium-sized systems, SeMSy® Compact is ideal for the evaluation of counting results and corresponding recordings, also graphically supported with the optional SeMSy® Compact Dashboard. The messages defined on the camera when limit values are reached can be received as event messages via the Dallmeier Event Manager or via Dallmeier recording systems with the option of automatically displaying the live image or the corresponding recordings.

Client System

Larger Hemisphere® SeMSy® systems support the reception and processing of messages defined on the camera with the Enterprise Event Processing Module. In addition, the People Counting Module enables the independent processing of pure counting results. The module supports the creation of multiple counting zones, the fill levels of which can be displayed color-coded in the map view. Different limit values can be defined for each zone, which trigger a message in the Alarm Inbox Application when they are reached. The messages and counting results can be displayed graphically in individual dashboards and evaluated with definable workflows.

Licensing

The AI High Resolution Counting App is activated after entering the corresponding license code on the camera²⁾. The neural AI High Resolution Counting network must be installed additionally after licensing.

Note for the App

The AI High Resolution Counting App cannot be used simultaneously with the EdgeAnalytics AI Essential Apps. However, switching between the two operating modes is supported.

Note for the Net

The neural AI High Resolution Counting network requires visual conditions for object recognition that are comparable to human perception. Deviating counting results are to be expected in unfavorable lighting conditions or when objects are heavily obscured.

1) A Domera® camera can detect up to 500 objects (people and vehicles) in the overall image, a Panomera® S/W 4 up to 2000 objects and a Panomera® S/W 8 up to 4000 objects.

2) The AI High Resolution Counting App can be used independently. A license for the EdgeAnalytics AI Essential Apps is not required.

AI High Resolution Counting App

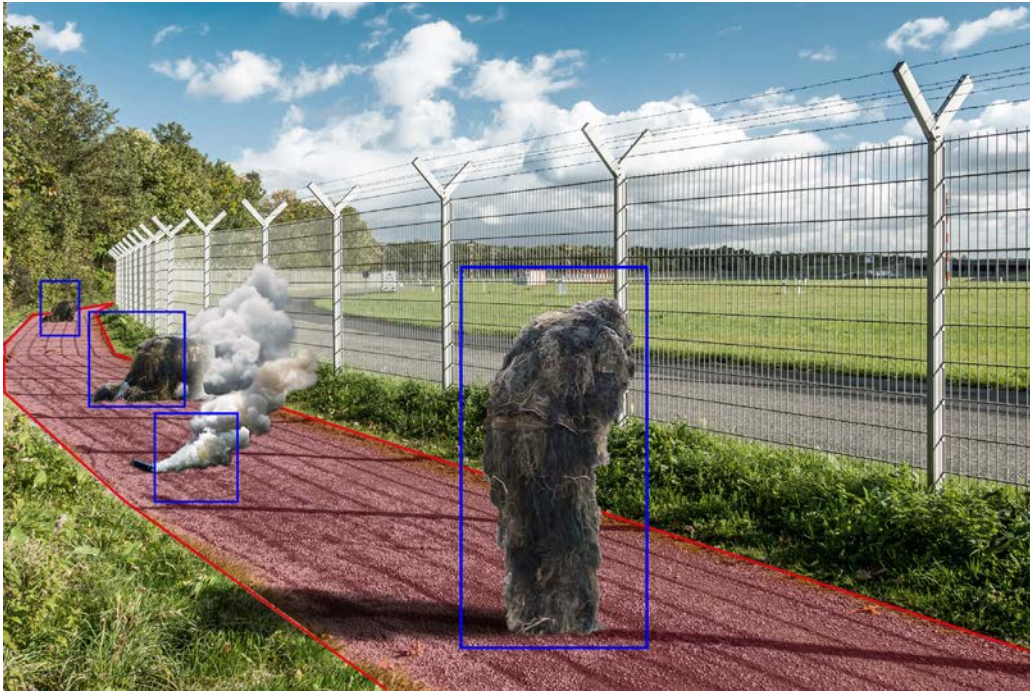
EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports based on the AI High Resolution Counting neural network for object classification of persons and vehicles

License	
009293	DLC – Domera® AI High Resolution Counting App License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Domera® camera.
009294	DLC – Panomera® S/W 4 AI High Resolution Counting App License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 4 camera.
009295	DLC – Panomera® S/W 8 AI High Resolution Counting App License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 8 camera.



AI Perimeter App Package

EdgeAnalytics AI Perimeter App for the definition of sterile zones and reporting of intruders based on the neural network AI Perimeter for object classification of people with unusual body postures



The AI Perimeter App and the AI Extended Tamper Detection App as well as the underlying neural AI Perimeter Network, are designed for the video-based protection of sensitive areas where attacks by well-prepared groups of perpetrators are expected. Typical use cases include securing the perimeter of factory premises, logistics centers or airports.

AI Perimeter App

The AI Perimeter App is specifically designed to meet the needs of perimeter protection. It allows the definition of specially protected areas (sterile zone) with pre-zones. When relevant objects (people, vehicles, etc.) enter these zones, it allows the escalation of appropriate messages to draw the operators' attention to the most important events.

AI Perimeter Object Classification

The AI Perimeter neural network is specifically designed to detect attacks by well-prepared groups of perpetrators. It reliably detects people with unusual body postures (bent over, squatting, lying down) and movement patterns (very slow, very fast, crawling, creeping, rolling). The type of clothing (light, dark) is irrelevant and the network has been intensively trained to detect people in camouflage suits (British Smock, Camouflage Central Europe, Ghillie etc.).

AI Extended Tamper Detection App

The extended AI Tamper Detection App supports the detection of tampering attempts that are typically expected at a perimeter. In addition to the classic approaches (twisting, defocusing, spraying and covering the camera or IR illumination) the blinding of the camera (laser pointer, flashlight, strobe light) is also reliably detected. Indirect tampering through the use of pyrotechnics (fog grenades, smoke pots) is also detected and alerted.

Compatibility

The AI Perimeter App and the associated AI Perimeter neural network have been developed together with the AI Extended Tamper Detection App for the innovative Panomera® S4 Perimeter. However, all components of this package can also be used with the current Domera® cameras of the RDF6000 series and with all Panomera® S4 and 8 (MK2) cameras.

Licensing

The AI Perimeter App and the AI Extended Tamper Detection App are activated after entering the corresponding license code on the camera¹⁾. The neural AI Perimeter network must be installed additionally after licensing.

Note for the App

The AI Perimeter App cannot be used simultaneously with the EdgeAnalytics AI Essential Apps. However, switching between the two operating modes is supported.

Note for the Net

The neural AI High Resolution Counting network requires visual conditions for object recognition that are comparable to human perception. Deviating results are to be expected in unfavorable lighting conditions or when people are heavily obscured.

¹⁾ The AI Perimeter App and the AI Extended Tamper Detection App can be used independently. A license for the EdgeAnalytics AI Essential Apps is not required.

AI Perimeter App Package

EdgeAnalytics AI Perimeter App for the definition of sterile zones and reporting of intruders based on the neural network AI Perimeter for object classification of people with unusual body postures

License	
009336	DLC - Domera® AI Perimeter App Package License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.
009291	DLC - Panomera® S4 AI Perimeter App Package License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.
009337	DLC - Panomera® S8 AI Perimeter App Package License for the use of the neural network AI Perimeter for the object classification of persons (also with unusual posture, movement type and clothing), cars, large vehicles and two-wheelers. License for the use of the EdgeAnalytics AI Perimeter App with protected areas, pre-zones and escalation of messages based on object classification. License for the use of the EdgeAnalytics AI Extended Tamper App with advanced tamper detection based on changes of the captured scene.



Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Server



Dallmeier Recording Appliance 16

Server hardware, 3RU rack-mount, 1x 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, up to 16x 3.5" HDDs, hardware RAID controller, 2x redundant 256 GB M.2 NVMe SSD, 2x redundant power supplies



Features

- Proxmox¹⁾ VE hypervisor included
- Two redundant M.2 NVMe SSD 256GB for hypervisor
- Highest availability thanks to redundant boot media
- Virtual machine for hardware monitoring
- Intel Xeon²⁾ Gold 5412U, 24-core, 2.1GHz CPU
- Main memory 64GB DDR5 RAM
- Drive bays for 16x hard disks
- SAS hard disks optional
- Expandable with optional Storage JBODs
- Broadcom³⁾ 9580-8i8e RAID controller included (management of internal HDDs and optional JBODs supported)
- Two highly efficient and redundant power supplies
- Robust 3 RU rack-mount storage server chassis
- Mounting rails for 19" rack included

Suitable for

- SeMSy[®] Recording Server VM 5
- Recording of up to 240 video channels

Hardware		
	009050.401	Dallmeier Recording Appliance 16 Server hardware, 3 RU rack-mount, 1x 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, 16x 3.5" HDD drive bays (storage), 1x Broadcom 9580-8i8e RAID controller, 2x redundant 256 GB M.2 NVMe SSD (hypervisor), 2x redundant power supplies, Proxmox VE included, without hard disks
Power Supply Unit		
	006842	Power Supply Unit DPM-1200W Power supply module 1200 W, 110/240 V AC, 50/60 Hz

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2) Intel and Xeon are trademarks or registered trademarks of Intel Corporation headquartered in Santa Clara, California, USA
3) Broadcom is a trademark or registered trademark of Broadcom Corporation headquartered in Irvine, California, USA

Dallmeier Recording Appliance 16

Server hardware, 3RU rack-mount, 1× 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, up to 16× 3.5" HDDs, hardware RAID controller, 2× redundant 256 GB M.2 NVMe SSD, 2× redundant power supplies

Services		
005554	DSI - System Setup (VM Server)	Assembly (hard disks, memory modules, controller, firmware), RAID system setup, installation and update of the operating system including drivers, software installation, system tests (run-in) FAT System Customizing
Options Hard Disk Drives		
000178	Mounting of a HDD	Mounting of a HDD, function, long-term-, and final test, acceptance and approval included
	007345	HDD 4000 GB, SAS, 3.5 inches
	007512	HDD 6000 GB, SAS, 3.5 inches
	007529	HDD 8000 GB, SAS, 3.5 inches
	008170	HDD 10000 GB, SAS, 3.5 inches
	009172	HDD 14000 GB, SAS, 3.5 inches
	008322	HDD 18000 GB, SAS, 3.5 inches
	008772	HDD 20000 GB, SAS, 3.5 inches
Options Storage Expansion		
	008476.401	Storage JBOD 12 III Storage extension, 2 RU rack-mount, for up to 12 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006946	Storage JBOD 24 II Storage extension, 4 RU rack-mount, for up to 24 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006949	Storage JBOD 44 II Storage extension, 4 RU rack-mount, for up to 44 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
Option Network		
	008160	Network Adapter Card 10 GBit Network adapter card, 2× SFP+ Ports, 10GBase-T, PCI Express
Option Network Contacts		
	005142	DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)
	001739	Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contact, 6× relay (MOXA ioLogik E1214)

Dallmeier Recording Appliance 24

Server hardware, 4RU rack-mount, 1x 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, up to 24x 3.5" HDDs, hardware RAID controller, 2x redundant 256 GB M.2 NVMe SSD, 2x redundant power supplies



Features

- Proxmox¹⁾ VE hypervisor included
- Two redundant M.2 NVMe SSD 256 GB for hypervisor
- Highest availability thanks to redundant boot media
- Virtual machine for hardware monitoring
- Intel Xeon²⁾ Gold 5412U, 24-core, 2.1GHz CPU
- Main memory 64GB DDR5 RAM
- Drive bays for 24x hard disks
- SAS hard disks optional
- Expandable with optional Storage JBODs
- Broadcom³⁾ 9580-8i8e RAID controller included (management of internal HDDs and optional JBODs supported)
- Two highly efficient and redundant power supplies
- Robust 4RU rack-mount storage server chassis
- Mounting rails for 19" rack included

Suitable for

- SeMSy® Recording Server VM 5
- Recording of up to 240 video channels

Hardware		
	009051.401	Dallmeier Recording Appliance 24 Server hardware, 4RU rack-mount, 1x 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, 24x 3.5" HDD drive bays (storage), 1x Broadcom 9580-8i8e RAID controller, 2x redundant 256 GB M.2 NVMe SSD (hypervisor), 2x redundant power supplies, Proxmox VE included, without hard disks
Power Supply Unit		
	006842	Power Supply Unit DPM-1200W Power supply module 1200 W, 110/240 V AC, 50/60 Hz

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2) Intel and Xeon are trademarks or registered trademarks of Intel Corporation headquartered in Santa Clara, California, USA
3) Broadcom is a trademark or registered trademark of Broadcom Corporation headquartered in Irvine, California, USA

Dallmeier Recording Appliance 24

Server hardware, 4RU rack-mount, 1× 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, up to 24× 3.5" HDDs, hardware RAID controller, 2× redundant 256 GB M.2 NVMe SSD, 2× redundant power supplies

Services		
005554	DSI - System Setup (VM Server)	Assembly (hard disks, memory modules, controller, firmware), RAID system setup, installation and update of the operating system including drivers, software installation, system tests (run-in) FAT System Customizing
Options Hard Disk Drives		
000178	Mounting of a HDD	Mounting of a HDD, function, long-term-, and final test, acceptance and approval included
	007345	HDD 4000 GB, SAS, 3.5 inches
	007512	HDD 6000 GB, SAS, 3.5 inches
	007529	HDD 8000 GB, SAS, 3.5 inches
	008170	HDD 10000 GB, SAS, 3.5 inches
	009172	HDD 14000 GB, SAS, 3.5 inches
	008322	HDD 18000 GB, SAS, 3.5 inches
	008772	HDD 20000 GB, SAS, 3.5 inches
Options Storage Expansion		
	008476.401	Storage JBOD 12 III Storage extension, 2 RU rack-mount, for up to 12 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006946	Storage JBOD 24 II Storage extension, 4 RU rack-mount, for up to 24 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006949	Storage JBOD 44 II Storage extension, 4 RU rack-mount, for up to 44 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
Option Network		
	008160	Network Adapter Card 10 GBit Network adapter card, 2× SFP+ Ports, 10GBase-T, PCI Express
Option Network Contacts		
	005142	DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)
	001739	Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contact, 6× relay (MOXA ioLogik E1214)

Dallmeier Recording Appliance 36

Server hardware, 4RU rack-mount, 1x 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, up to 36x 3.5" HDDs, hardware RAID controller, 2x redundant 256 GB M.2 NVMe SSD, 2x redundant power supplies



Features

- Proxmox¹⁾ VE hypervisor included
- Two redundant M.2 NVMe SSD 256 GB for hypervisor
- Highest availability thanks to redundant boot media
- Virtual machine for hardware monitoring
- Intel Xeon²⁾ Gold 5412U, 24-core, 2.1GHz CPU
- Main memory 64 GB DDR5 RAM
- Drive bays for 36x hard disks
- SAS hard disks optional
- Expandable with optional Storage JBODs
- Broadcom³⁾ 9580-8i8e RAID controller included (management of internal HDDs and optional JBODs supported)
- Two highly efficient and redundant power supplies
- Robust 4RU rack-mount storage server chassis
- Mounting rails for 19" rack included

Suitable for

- SeMSy[®] Recording Server VM 5
- Recording of up to 240 video channels

Hardware



009052.401

Dallmeier Recording Appliance 36

Server hardware, 4RU rack-mount, 1x 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, 36x 3.5" HDD drive bays (storage), 1x Broadcom 9580-8i8e RAID controller, 2x redundant 256 GB M.2 NVMe SSD (hypervisor), 2x redundant power supplies, Proxmox VE included, without hard disks

Power Supply Unit



006842

Power Supply Unit DPM-1200W

Power supply module 1200 W, 110/240 V AC, 50/60 Hz

1) Proxmox is a registered trademark of Proxmox Server Solutions GmbH in the EU, the U.S. and other countries

2) Intel and Xeon are trademarks or registered trademarks of Intel Corporation headquartered in Santa Clara, California, USA

3) Broadcom is a trademark or registered trademark of Broadcom Corporation headquartered in Irvine, California, USA

Dallmeier Recording Appliance 36

Server hardware, 4 RU rack-mount, 1× 24-core 2.1 GHz CPU, 64 GB DDR5 RAM, 12 Gbps data throughput, up to 36× 3.5" HDDs, hardware RAID controller, 2× redundant 256 GB M.2 NVMe SSD, 2× redundant power supplies

Services		
005554	DSI - System Setup (VM Server)	Assembly (hard disks, memory modules, controller, firmware), RAID system setup, installation and update of the operating system including drivers, software installation, system tests (run-in) FAT System Customizing
Options Hard Disk Drives		
000178	Mounting of a HDD	Mounting of a HDD, function, long-term-, and final test, acceptance and approval included
	007345	HDD 4000 GB, SAS, 3.5 inches
	007512	HDD 6000 GB, SAS, 3.5 inches
	007529	HDD 8000 GB, SAS, 3.5 inches
	008170	HDD 10000 GB, SAS, 3.5 inches
	009172	HDD 14000 GB, SAS, 3.5 inches
	008322	HDD 18000 GB, SAS, 3.5 inches
	008772	HDD 20000 GB, SAS, 3.5 inches
Options Storage Expansion		
	008476.401	Storage JBOD 12 III Storage extension, 2 RU rack-mount, for up to 12 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006946	Storage JBOD 24 II Storage extension, 4 RU rack-mount, for up to 24 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
	006949	Storage JBOD 44 II Storage extension, 4 RU rack-mount, for up to 44 hard disks, RAID 6, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
Option Network		
	008160	Network Adapter Card 10 GBit Network adapter card, 2× SFP+ Ports, 10GBase-T, PCI Express
Option Network Contacts		
	005142	DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)
	001739	Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contact, 6× relay (MOXA ioLogik E1214)

Notes

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JBODs



Storage JBOD 12 III

Storage extension, 2 RU rack-mount, for up to 12 hard disks, RAID 6, 1x cable SFF-8088, 2x redundant power supplies, without hard disk drives



The **Storage JBOD 12 III** is a storage system for the expansion of the storage capacity of Dallmeier recording systems.

Storage System

The Storage JBOD 12 III has 12 slots for hard disks at the front. Fully equipped with the optionally offered 20 TB server hard disks, a RAID 6 storage capacity of 200 TB is available.

Control

The Storage JBOD 12 III forms its own RAID system, which is controlled by the RAID controller of the recording system. A RAID network with the internal hard disks of the recording system is not provided.

Features

- Trays for 12 hard drives included
- SAS or SATA hard disks optional
- Hot-swap of disks supported
- External connection cable 12 Gbps included
- Two highly efficient and redundant power supplies included
- Mounting rails for 19" rack included in delivery

JBOD		
	008476.401	Storage JBOD 12 III Storage extension, 2 RU rack-mount, for up to 12 hard disks, RAID 6, 1x cable SFF-8088, 2x redundant power supplies, without hard disk drives
Power Supply Unit		
	008472	Power Supply Unit DPM-600W/650W Power supply module 600 W/650 W, 110/240 V AC, 50/60 Hz

Storage JBOD 12 III

Storage extension, 2 RU rack-mount, for up to 12 hard disks, RAID 6,
1x cable SFF-8088, 2x redundant power supplies, without hard disk drives

SAS Hard Disk Drives in Connection with Storage Server		
	000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	007345	HDD 4000GB, SAS, 3,5 inches
	007512	HDD 6000GB, SAS, 3,5 inches
	007529	HDD 8000GB, SAS, 3,5 inches
	008170	HDD 10000GB, SAS, 3,5 inches
	009172	HDD 14000GB, SAS, 3,5 inches
	008322	HDD 18000GB, SAS, 3,5 inches
	008772	HDD 20000GB, SAS, 3,5 inches

SATA Hard Disk Drives in Connection with IPS 10 000		
	000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	007521	HDD 2000GB, SATA, 3,5 inches
	007305	HDD 4000GB, SATA, 3,5 inches
	009156	HDD 6000GB, SATA, 3,5 inches
	007914	HDD 8000GB, SATA, 3,5 inches
	008997	HDD 10000GB, SATA, 3,5 inches
	009023	HDD 12000GB, SATA, 3,5 inches
	009174	HDD 14000GB, SATA, 3,5 inches
	008183	HDD 16000GB, SATA, 3,5 inches
	008055	HDD 18000GB, SATA, 3,5 inches
	009141	HDD 20000GB, SATA, 3,5 inches
	009000	HDD 22000GB, SATA, 3,5 inches

Storage JBOD 24 II

Storage extension, 4 RU rack-mount, for up to 24 hard disks, RAID 6, 1x cable SFF-8088, 2x redundant power supplies, without hard disk drives



The **Storage JBOD 24 II** is a storage system for the expansion of the storage capacity of Dallmeier recording systems.

Storage System

The Storage JBOD 24 II has 24 slots for hard disks at the front. Fully equipped with the optionally offered 20 TB server hard disks, a RAID 6 storage capacity of 440 TB is available.

Control

The JBOD 24 II storage forms its own RAID system, which is controlled by the RAID controller of the recording system. A RAID network with the internal hard disks of the recording system is not provided.

Features

- Trays for 24 hard drives included
- SAS or SATA hard disks optional
- Hot-swap of disks supported
- External connection cable 12 Gbps included
- Two highly efficient and redundant power supplies included
- Mounting rails for 19" rack included in delivery

JBOD		
	006946	Storage JBOD 24 II Storage extension, 4 RU rack-mount, for up to 24 hard disks, RAID 6, 1x cable SFF-8088, 2x redundant power supplies, without hard disk drives
Power Supply Unit		
	006303	Power Supply Unit DPM-1000W Power supply module 1000 W, 110/240 V AC, 50/60 Hz,

Storage JBOD 24 II

Storage extension, 4 RU rack-mount, for up to 24 hard disks, RAID 6,
1x cable SFF-8088, 2x redundant power supplies, without hard disk drives

SAS Hard Disk Drives in Connection with Storage Server		
	000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	007345	HDD 4000GB, SAS, 3,5 inches
	007512	HDD 6000GB, SAS, 3,5 inches
	007529	HDD 8000GB, SAS, 3,5 inches
	008170	HDD 10000GB, SAS, 3,5 inches
	009172	HDD 14000GB, SAS, 3,5 inches
	008322	HDD 18000GB, SAS, 3,5 inches
	008772	HDD 20000GB, SAS, 3,5 inches

SATA Hard Disk Drives in Connection with IPS 10 000		
	000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	007521	HDD 2000GB, SATA, 3,5 inches
	007305	HDD 4000GB, SATA, 3,5 inches
	009156	HDD 6000GB, SATA, 3,5 inches
	007914	HDD 8000GB, SATA, 3,5 inches
	008997	HDD 10000GB, SATA, 3,5 inches
	009023	HDD 12000GB, SATA, 3,5 inches
	009174	HDD 14000GB, SATA, 3,5 inches
	008183	HDD 16000GB, SATA, 3,5 inches
	008055	HDD 18000GB, SATA, 3,5 inches
	009141	HDD 20000GB, SATA, 3,5 inches
	009000	HDD 22000GB, SATA, 3,5 inches



Storage JBOD 44 II

Storage extension, 4 RU rack-mount, for up to 44 hard disks, 2× RAID 6 volume, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives



The **Storage JBOD 44 II** is a storage system for the expansion of the storage capacity of Dallmeier recording systems.

Storage System

The Storage JBOD 44 II has 24 slots for hard disks at the front and 20 on the rear side. Fully equipped with the optionally offered 20 TB server hard disks, two RAID 6 volumes with a total storage capacity of 800 TB are available.

Control

The JBOD 44 II storage forms its own RAID system, which is controlled by the RAID controller of the recording system. A RAID network with the internal hard disks of the recording system is not provided.

Features

- Trays for 44 hard drives included
- SAS or SATA hard disks optional
- Hot-swap of disks supported
- External connection cable 12 Gbps included
- Two highly efficient and redundant power supplies included
- Mounting rails for 19" rack included in delivery

JBOD		
	006949	Storage JBOD 44 II Storage extension, 4 RU rack-mount, for up to 44 hard disks, 2× RAID 6 volume, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives
Power Supply Unit		
	006842	Power Supply Unit DPM-1200W Power supply module 1200 W, 110/240 V AC, 50/60 Hz,

Storage JBOD 44 II

Storage extension, 4 RU rack-mount, for up to 44 hard disks, 2× RAID 6 volume, 1× cable SFF-8088, 2× redundant power supplies, without hard disk drives

SAS Hard Disk Drives in Connection with Storage Server		
	000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	007345	HDD 4000GB, SAS, 3,5 inches
	007512	HDD 6000GB, SAS, 3,5 inches
	007529	HDD 8000GB, SAS, 3,5 inches
	008170	HDD 10000GB, SAS, 3,5 inches
	009172	HDD 14000GB, SAS, 3,5 inches
	008322	HDD 18000GB, SAS, 3,5 inches
	008772	HDD 20000GB, SAS, 3,5 inches

SATA Hard Disk Drives in Connection with IPS 10 000		
	000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	007521	HDD 2000GB, SATA, 3,5 inches
	007305	HDD 4000GB, SATA, 3,5 inches
	009156	HDD 6000GB, SATA, 3,5 inches
	007914	HDD 8000GB, SATA, 3,5 inches
	008997	HDD 10000GB, SATA, 3,5 inches
	009023	HDD 12000GB, SATA, 3,5 inches
	009174	HDD 14000GB, SATA, 3,5 inches
	008183	HDD 16000GB, SATA, 3,5 inches
	008055	HDD 18000GB, SATA, 3,5 inches
	009141	HDD 20000GB, SATA, 3,5 inches
	009000	HDD 22000GB, SATA, 3,5 inches



Notes

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Workstations

Tower and Rack-Mount



Workstation 4 Rack-Mount

Workstation, 4RU rack-mount, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 2× power supply 1200 W, 19" mounting rail kit, 1× license for Microsoft Windows 11 Pro (64 bit)



Features

- License for Microsoft Windows¹⁾ 11 Pro 64 bit operating system
- CPU Intel Xeon²⁾ W3-2435, 8-core, 3.1GHz
- 32 GB DDR5 RAM
- 512 GB NVMe M.2 SSD for operating system
- Robust 4RU rack-mount chassis (black)
- Two highly efficient and redundant power supplies
- Mounting rail kit for 19" rack included
- Compatible with VMC-2 and VMC-3

Features Variant 401 (Standard)

- NVIDIA³⁾ graphics cards for simultaneous decoding and displaying of up to 30 HD video streams
- Output to two UHD or four Full HD monitors supported

Features Variant 402 (Professional)

- NVIDIA³⁾ graphics cards for simultaneous decoding and displaying of up to 60 HD video streams
- Output to two UHD or four Full HD monitors supported

Suitable for

- SeMSy® Compact
- Hemisphere® SeMSy® Workstation Software

Suitable for

- SeMSy® Compact
- Hemisphere® SeMSy® Workstation Software
- Hemisphere® SeMSy® Variodecoder Software

1) Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation headquartered in Redmond, Washington, USA

2) Intel and Xeon are trademarks or registered trademarks of Intel Corporation headquartered in Santa Clara, California, USA

3) NVIDIA is a trademark or registered trademark of NVIDIA Corporation headquartered in Santa Clara, California, USA

Workstation 4 Rack-Mount

Workstation, 4 RU rack-mount, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 2× power supply 1200 W, 19" mounting rail kit, 1× license for Microsoft Windows 11 Pro (64 bit)

Workstation		
	009176.401	Workstation 4 Rack-Mount (Standard) Workstation, 4 RU rack-mount, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 2× redundant power supply 1200 W, 19" mounting rail kit, 1× license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1× NVIDIA T400 graphics card (decoding), 1× NVIDIA GeForce RTX 4060 graphics card (decoding and display)
	009176.402	Workstation 4 Rack-Mount (Professional) Workstation, 4 RU rack-mount, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 2× redundant power supply 1200 W, 19" mounting rail kit, 1× license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1× NVIDIA T400 graphics card (decoding), 1× NVIDIA RTX 4000 SFF graphics card (decoding and display)
Options Hardware		
	007521	HDD 2000 GB, SATA, 3.5"
	007305	HDD 4000 GB, SATA, 3.5"
	008445	HDD 6000 GB, SATA, 3.5"
	007914	HDD 8000 GB, SATA, 3.5"
	007988	HDD 10000 GB, SATA, 3.5"
	008204	HDD 12000 GB, SATA, 3.5"
	007800	HDD 14000 GB, SATA, 3.5"
	007801	HDD 16000 GB, SATA, 3.5"
	008055	HDD 18000 GB, SATA, 3.5"
	008723	HDD 20000 GB, SATA, 3.5"
	009000	HDD 22000 GB, SATA, 3.5"
Services		
004845	DSI - System Setup Assembly (hard disks, memory modules, controller, firmware), RAID system setup, installation and update of the operating system including drivers, software installation, system tests (run-in)	
003692	DSI - FAT System Customizing Collection of project-specific requirements, individual adaptation and configuration of the system (hourly rate)	
004905	DSI - 3rd Party Workstation Evaluation (Daily Rate) Verification of 3rd party workstation compatibility, performance test, burn-in test (24 h), incl. test report (without long-term test)	

Workstation 4 Tower

Workstation, midi tower, variants for decoding and displaying 20, 30 or 60 video streams,
512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro



Features

- License for Microsoft Windows¹⁾ 11 Pro 64 bit operating system
- 512 GB NVMe M.2 SSD for operating system
- Compact housing (midi tower, black)
- Keyboard and mouse (black) included
- Compatible with VMC-2 and VMC-3

Features variant Basic

- CPU Intel Xeon²⁾ W3-2423, 6-Core, 2,1GHz
- 16 GB DDR5 RAM
- NVIDIA³⁾ graphics cards for simultaneous decoding and displaying of up to 20 HD video streams
- Output to one UHD or three Full HD monitors supported

Features variant Standard

- CPU Intel Xeon²⁾ W3-2435, 8-core, 3,1GHz
- 32 GB DDR5 RAM
- NVIDIA³⁾ graphics cards for simultaneous decoding and displaying of up to 30 HD video streams
- Output to two UHD or four Full HD monitors supported

Features variant Professional

- CPU Intel Xeon²⁾ W3-2435, 8-core, 3,1GHz
- 32 GB DDR5 RAM
- NVIDIA³⁾ graphics cards for simultaneous decoding and displaying of up to 60 HD video streams
- Output to two UHD or four Full HD monitors supported

Suitable for

- SeMSy® Compact
- Hemisphere® SeMSy® Workstation Software

Suitable for

- SeMSy® Compact
- Hemisphere® SeMSy® Workstation Software

Suitable for

- SeMSy® Compact
- Hemisphere® SeMSy® Workstation Software
- Hemisphere® SeMSy® Variodecoder Software

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2) Intel and Xeon are trademarks or registered trademarks of Intel Corporation headquartered in Santa Clara, California, USA
3) NVIDIA is a trademark or registered trademark of NVIDIA Corporation headquartered in Santa Clara, California, USA

Workstation 4 Tower

Workstation, midi tower, variants for decoding and displaying 20, 30 or 60 video streams,
512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro

Workstation		
	009286.401	Workstation 4 Tower (Basic) Workstation, midi tower, Xeon-W 6-Core 2,1GHz CPU, 16GB DDR5 RAM, 512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1x NVIDIA GeForce RTX 3050 graphics card (decoding and display)
	009157.401	Workstation 4 Tower (Standard) Workstation, midi tower, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1x NVIDIA T400 graphics card (decoding), 1x NVIDIA GeForce RTX 4060 graphics card (decoding and display)
	009157.402	Workstation 4 Tower (Professional) Workstation, midi tower, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1x NVIDIA T400 graphics card (decoding), 1x NVIDIA RTX 4000 SFF graphics card (decoding and display)

Options Hardware		
	007521	HDD 2000 GB, SATA, 3.5"
	007305	HDD 4000 GB, SATA, 3.5"
	009156	HDD 6000 GB, SATA, 3.5"
	007914	HDD 8000 GB, SATA, 3.5"
	008997	HDD 10000 GB, SATA, 3.5"
	009023	HDD 12000 GB, SATA, 3.5"
	009174	HDD 14000 GB, SATA, 3.5"
	008183	HDD 16000 GB, SATA, 3.5"
	008055	HDD 18000 GB, SATA, 3.5"
	009141	HDD 20000 GB, SATA, 3.5"
	009000	HDD 22000 GB, SATA, 3.5"

Services	
004845	DSI - System Setup Assembly (hard disks, memory modules, controller, firmware), RAID system setup, installation and update of the operating system including drivers, software installation, system tests (run-in)
003692	DSI - FAT System Customizing Collection of project-specific requirements, individual adaptation and configuration of the system (hourly rate)
004905	DSI - 3rd Party Workstation Evaluation (Daily Rate) Verification of 3rd party workstation compatibility, performance test, burn-in test (24 h), incl. test report (without long-term test)

Video Management Center for the Control of the HEMISPHERE® SeMSy® Video Management System with Joystick, Touch Screen and Jog-Shuttle



The Video Management Center VMC-3 is designed for the control of the HEMISPHERE® SeMSy® Video Management System over a SeMSy® Workstation.

The VMC-3 is made up of the components VMC-3 Joystick, VMC-4 Touch and VMC-3 Jog-Shuttle in a modular and very flexible way. The individual components are freely positionable and therefore ideally suited for left- and right-handers. It is also possible to use the components independently of each other as stand-alone devices.

VMC-3 Joystick

The joystick enables the security operator to conveniently control movable cameras. Pan, tilt and zoom movements can be performed intuitively. With just a single click on the joystick button, the camera automatically returns to its home position. If the mode is switched, the joystick can also be used as a mouse and thus allows simple menu control.

VMC-4 Touch

The touch screen extends a workstation by a simple and convenient multi-touch control of the functions displayed on the monitor. The intuitive user interface allows the security operator to activate live streams in any viewer on the workstation and to precisely control PTZ cameras. Full control over the playback of recordings is supported, as is the definition and triggering of backups. In addition, an advanced snapshot function can be used for individual markings and comments directly in the image.

VMC-3 Jog-Shuttle

The Jog-Shuttle is ideal for quickly finding specific frames in a video sequence. By rotating the central jog-dial, the security operator can easily move through individual frames. With the help of the surrounding shuttle ring, the scenes can then be played backwards or forwards at different speeds.

Features

- Joystick for intuitive control of PTZ dome cameras
- Touch screen for operation of SeMSy® Maps
- Touch screen for operation of playback functions
- Jog-Shuttle for detailed evaluation of video sequences
- Smooth and low-maintenance surface
- Ergonomic operation due to intelligent design
- Flexible positioning of the individual components
- DIN EN 50130-4 compliant

Compatibility VMC-3

- SeMSy® III Workstation Software as of version 1.8.1¹⁾
- HEMISPHERE® SeMSy® Workstation Software as of version 1.5.49/5.0.1

Compatibility VMC-3 Joystick

- SMAVIA Viewing Client 2 as of version 2.9.6²⁾
- SMAVIA Viewing Client 3 as of version 3.1²⁾
- SeMSy® Compact as of version 5.1.10²⁾

System Requirements

- Dallmeier Workstation generation 2 or 3
- Microsoft Windows³⁾ 10 Professional as of Build 1809

1) In connection with a SeMSy III workstation the program library Hydra.dll (version 3.1.0.2) is required.

2) Control and function keys supported. Feedback through illuminated LEDs (white / blue) in preparation.

3) Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation headquartered in Redmond, Washington, USA

Video Management Center for the Control of the HEMISPHERE® SeMSy® Video Management System
with Joystick, Touch Screen and Jog-Shuttle

Hardware		
	008839	VMC-3 Modular control panel consisting of VMC-4 Touch and Holder, VMC-3 Joystick, VMC-3 Jog-Shuttle, including license DLD - HEMISPHERE® SeMSy® VMC Touch Module for one HEMISPHERE® SeMSy® Workstation
	008502	VMC-3 Joystick Joystick module of the VMC-3 control panel as stand-alone device, 1x USB 2.0 cable 2 m

Notes

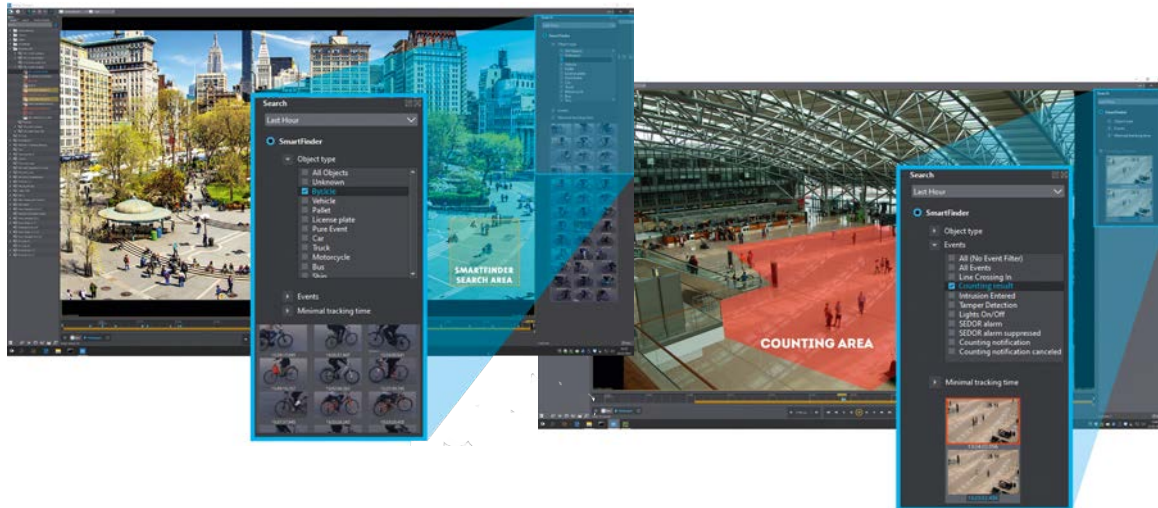
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Software



SeMSy® Compact

Video management software for comprehensive and independent control and evaluation of video security systems on a dedicated workstation



SeMSy® Compact is a stand-alone video management software for the comprehensive control and evaluation of video security systems on a dedicated workstation. In addition to the fast and intuitive display of live views, the integrated functions support efficient evaluation of recordings.

Functions

SeMSy® Compact offers a variety of functions for the management of the entire system. These range from integrated user administration to functions for creating and managing local backups with the integrated backup manager.

Comfort Functions

SeMSy® Compact offers comfort functions that allow relevant sequences to be found quickly and conveniently on the basis of analysis data. The advanced SmartFinder function displays search results with preview images and enables filtering based on the available analysis criteria. The relevant sequences are also clearly displayed in the timeline. The operator can thus conveniently compare the search results and display the sequences he is looking for by drag & drop.

AutoTracking

The optional SeMSy® Compact AutoTracking function uses the VCA data of Dallmeier network cameras and Panomera® systems. While the video stream is displayed (live and playback), the analysis data allows the detection of image areas with moving persons or objects. These areas are displayed optimally zoomed in a detail split and ensure a targeted attention control during the evaluation.

AI Pixelation¹⁾

SeMSy® Compact allows optionally and in combination with the Deep AI object classification on Dallmeier cameras and Panomera® systems the pixelation of objects (persons, vehicles, etc.) during the display of a video stream. The function is available for both live images and recordings and can be activated for a defined user group.

Dashboard

The optional SeMSy® Compact Dashboard displays the VCA data of the event types Line Crossing, Intrusion Detection and Object Counting of Dallmeier network cameras and Panomera® systems in a separate window as a bar chart. In addition to a basic overview of all events, individual cameras can be selected for the evaluation of the recorded events over the course of the day.

Licensing

SeMSy® Compact is licensed by means of a Client Access License on the connected recording systems. The scope of delivery already includes the license for simultaneous access with basic functions for two SeMSy® Compact clients. For using the Timeline, Interval Jumps and SmartFinder function, the recording system must also have a valid license for the use of comfort functions and maintenance.²⁾ For the use of the optionally offered extended functions, a SeMSy® Compact Pro Dongle is required.

Maintenance

New versions of SeMSy® Compact are always offered as a full installation, which can be executed without further action. For the update of the optionally offered extended functions, a SeMSy® Compact Pro Dongle is required. It already contains a 12-month license for the update of the extended functions. This license can be extended ex works but also subsequently by another 12 months up to a total of 60 months.

Further Features

- Split definition function for Panomera® supported
- Corridor mode function for Panomera® supported
- Overview mode function for Panomera® supported
- Zoom with overview function for Panomera® supported
- Backup Manager function supported
- SmartZoom function for PRemote-HD supported
- Compatible with SeMSy® Recording Server

System Requirements

Dallmeier Workstation 4 (variant 401) or comparable³⁾:

- CPU 8-Core 3.1GHz (Base)
- 32GB DDR5 RAM
- 512GB NVMe M.2 SSD
- Graphics cards: 1x NVIDIA T400 + 1x NVIDIA GeForce RTX 4060
- Min. screen resolution 1920 x 1080 px
- Windows 10 and 11 Pro operating system (64 bit)

¹⁾ SeMSy® Compact uses the analysis data from the cameras as the basis for the pixelated display. The performance requirement for the pixelated display (number of splits displayed, number of pixelated objects) is negligible if the workstation meets the system requirements. Pixelation is not supported in connection with backups.

²⁾ After a gap-free Premium licensing period of 60 months, the comfort functions and extensions can be used with SeMSy® Compact Clients for an unlimited period of time.

³⁾ Virtualized graphics processors (GPUs) are not supported.

SeMSy® Compact

Video management software for comprehensive and independent control and evaluation of video security systems on a dedicated workstation

SeMSy® Compact Pro Dongle	
008663.401	SeMSy® Compact Pro Dongle (Pro Max) Dongle for the licensing of the extended functions of SeMSy® Compact, license for the update of the extended functions included for 12 months, licenses for the extended functions not included, 1x Dallmeier License Dongle (Pro Max)
008663.402	SeMSy® Compact Pro Dongle (Net 10) Dongle for the licensing of the extended functions of SeMSy® Compact, license for the update of the extended functions included for 12 months, licenses for the extended functions not included, 1x Dallmeier License Dongle (Net 10)
008663.406	SeMSy® Compact Pro Dongle (Net 250+) Dongle for the licensing of the extended functions of SeMSy® Compact, license for the update of the extended functions included for 12 months, licenses for the extended functions not included, 1x Dallmeier License Dongle (Net 250+)

Licenses for the Extended Functions of SeMSy® Compact	
008347	DLD - SC Multi Display Split-View License for use of the function for displaying split views on up to three connected monitors, for one SeMSy® Compact Workstation, 1x license for SeMSy® Compact Pro Dongle
008579	DLD - SC Monitorwall License for the use of a monitor wall connected to the workstation, display of a single split spanned across multiple monitors supported, for one SeMSy® Compact Workstation, 1x license for SeMSy® Compact Pro Dongle
008581	DLD - SC Combined Camera or Panomera® View License for the use of the function for displaying combined cameras or Panomera® systems, for one SeMSy® Compact Workstation, 1x license for SeMSy® Compact Pro Dongle
009228	DLD - SC Client AI Pixelation License for the use of the function for displaying pixelated objects (persons, vehicles, etc.) based on the Deep AI object classification of Dallmeier cameras and Panomera® systems, for one SeMSy® Compact Workstation, 1x license for SeMSy® Compact Pro Dongle

Maintenance for the Extended Functions of SeMSy® Compact	
008665	DLD - SeMSy® Compact Extended Functions Maintenance (Plus 12 Months) License for the installation of security updates and updates for the extended functions of SeMSy® Compact for 12 months, 1x license for SeMSy® Compact Pro Dongle (valid for all included advanced features and in case of network dongle (Net10, Net 250+) for multiple workstations)
008724	DLD - SeMSy® Compact Extended Functions Maintenance (Total of 60 Months) License for the installation of security updates and updates for the extended functions of SeMSy® Compact for 60 months, 1x license for SeMSy® Compact Pro Dongle (valid for all included advanced features and in case of network dongle (Net10, Net 250+) for multiple workstations)

Service	
008583	DSI - Panomera® Combination Combination of several Panomera® systems by adapting and linking the geometry data for display with Dallmeier Client Software as a complete image, billing according to time and effort, price per hour
008584	DSI - Camera Combination Combination of several Dallmeier single sensor cameras by adapting and linking the geometry data for display with Dallmeier Client Software as a complete image, billing according to time and effort, price per hour

SeMSy® Compact

Video management software for comprehensive and independent control and evaluation of video security systems on a dedicated workstation

Licenses for Dallmeier recording systems	
007238	DLC - SC AutoTracking for Single Sensor Camera License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Dallmeier network camera with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007239	DLC - SC AutoTracking for Panomera® S/W 4 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 4 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007237	DLC - SC AutoTracking for Panomera® S/W 8 License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 8 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007092	DLC - SC Dashboard License for the use of the SeMSy® Compact Dashboard function (graphical display of the analysis data Line Crossing, Intrusion Detection and Object Counting including object types), only in connection with Dallmeier network cameras and Panomera® systems with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance

Workstation	
	009157.401 Workstation 4 Tower (Standard) Workstation, midi tower, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1x NVIDIA T400 graphics card (decoding) + 1x NVIDIA GeForce RTX 4060 graphics card (decoding and display)
	009157.402 Workstation 4 Tower (Professional) Workstation, midi tower, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1x NVIDIA T400 graphics card (decoding) + 1x NVIDIA RTX 4000 SFF graphics card (decoding and display)
	009176.401 Workstation 4 Rack-Mount (Standard) Workstation, 4 RU rack-mount, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 2x redundant power supply 1200 W, 19" mounting rail kit, 1x license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1x NVIDIA T400 graphics card (decoding) + 1x NVIDIA GeForce RTX 4060 graphics card (decoding and display)
	009176.402 Workstation 4 Rack-Mount (Professional) Workstation, 4 RU rack-mount, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 2x redundant power supply 1200 W, 19" mounting rail kit, 1x license for Microsoft Windows 11 Pro (64 bit), without HDDs, 1x NVIDIA T400 graphics card (decoding) + 1x NVIDIA RTX 4000 SFF graphics card (decoding and display)

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SeMSy® Compact AutoTracking

SeMSy® Compact function for multiple, lossless and automatic tracking of persons and objects in connection with Panomera® Multifocal Sensor Systems and cameras with VCA support

Panomera® Multifocal Sensor Systems and cameras with integrated Video Content Analysis (VCA) detect motions, persons and objects in the uncompressed image. The detected events are combined and transmitted to the recording system in real time. In conjunction with SeMSy® Compact, they allow the targeted evaluation of live images and recordings and the use of the innovative AutoTracking function.



SeMSy® Compact Auto Tracking uses the VCA data of Dallmeier network cameras and Panomera® systems. While the video stream is displayed (live and playback), the analysis data allows the detection of image areas with moving persons or objects. These areas are displayed optimally zoomed in a detail split and ensure a targeted attention control during the evaluation.

1 Complete Overview

While displaying the overview image of a Panomera®, SeMSy® Compact processes the detected events in real time and marks all persons and objects with color-coded detection frames.

2 Multiple AutoTracking

If the detection time of a person or object exceeds the set threshold value, the corresponding image area is automatically displayed in a new split. For this, the person is zoomed in and tracked in detail over the entire object space.

3 Multiple Monitoring

SeMSy® Compact evaluates all events of the captured object space and simultaneously observes all moving persons or objects in almost real time, regardless of whether the events occur in the foreground or background.

4 Simultaneous Display

The automatic and simultaneous display of moving persons or objects in detail splits is principally unlimited. According to the resolution of the monitor, views with different numbers of splits can be selected, depending on the individual requirements for the size of the detail splits.

5 Lossless Capturing

A Panomera® always captures and records the entire object space. The detailed display of interesting areas with the AutoTracking function is of no importance. Unlike conventional PTZ cameras with a tracking function, Panomera® recordings always cover the entire scene and enable the evaluation of each individual event.

Independent Evaluation

The multi-user capability of the Panomera® is not restricted at all. While working with AutoTracking on one workstation, the same Panomera® can be displayed on a second workstation without tracking data or evaluated with digital zoom. Both operations are independent of each other and succeed in both live and playback mode.

Wide Range Of Applications

A Panomera® is generally suitable for the protection of large areas. In conjunction with AutoTracking, there are numerous application areas in which the targeted detection and display of scattered persons or objects is important. This function can be used, for example, to support the clearance of aircraft handling areas, but is also suitable for securing parking lots, halls or logistics areas.

Licensing

The SeMSy® Compact AutoTracking function is licensed with a code that is entered on the connected recording system. The recording system also has to have a valid license for the use of comfort and maintenance.

SeMSy® Compact AutoTracking

SeMSy® Compact function for multiple, lossless and automatic tracking of persons and objects in connection with Panomera® Multifocal Sensor Systems and cameras with VCA support

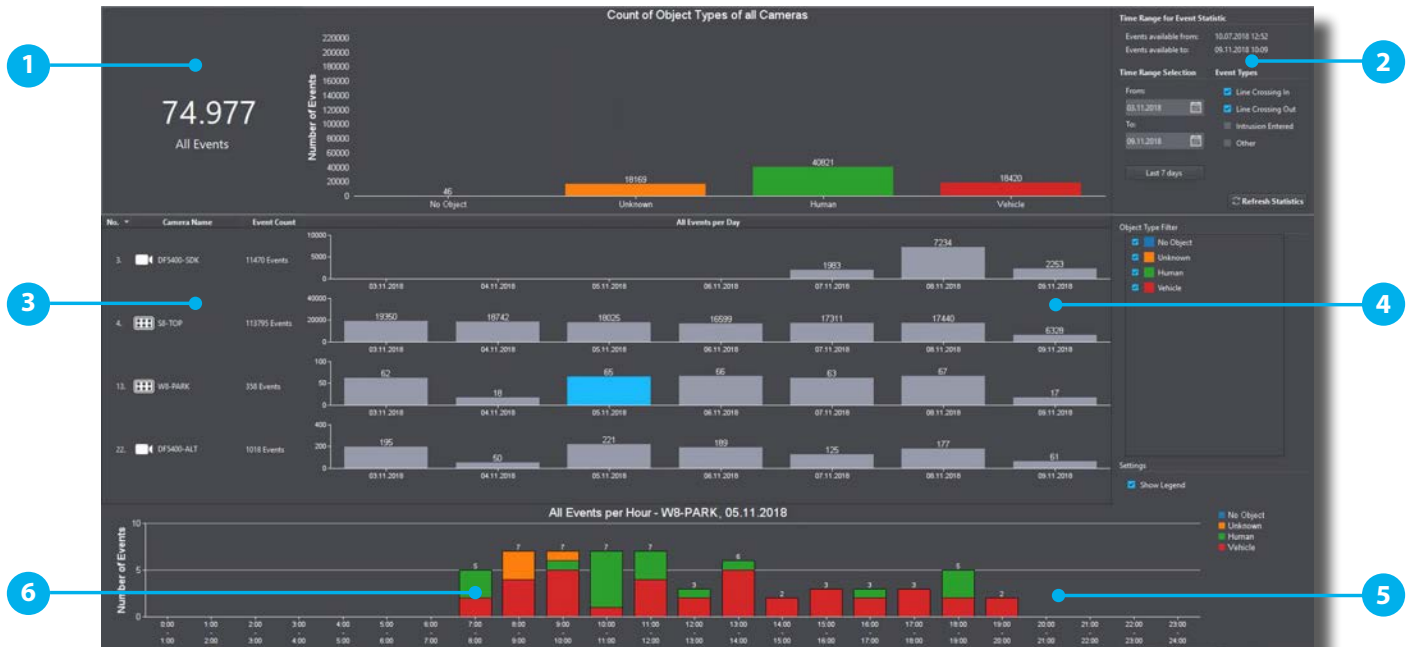
Licenses for SeMSy® Appliance	
007238	DLC - SC AutoTracking for Single Sensor Camera (IPS 10000) License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Dallmeier network camera with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007239	DLC - SC AutoTracking for Panomera® S/W 4 (IPS 10000) License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 4 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance
007237	DLC - SC AutoTracking for Panomera® S/W 8 (IPS 10000) License for the use of the SeMSy® Compact AutoTracking function (multiple object tracking without loss of the overall image) in conjunction with a Panomera® S/W 8 system with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance



SeMSy® Compact Dashboard

SeMSy® Compact Dashboard for graphical display of analysis data Line Crossing, Intrusion Detection and Object Counting in connection with Panomera® Multifocal Sensor Systems and cameras with VCA support

Panomera® Multifocal Sensor Systems and cameras with integrated Video Content Analysis (VCA) detect motions, persons and objects in the uncompressed image. The detected events are combined and transmitted to the recording system in real time. In combination with SeMSy® Compact, they allow a targeted evaluation of live images and recordings and the use of the convenient Dashboard function.



The SeMSy® Compact Dashboard displays the data of the event types Line Crossing, Intrusion Detection (image above) and Object Counting in a separate window as a bar chart. Besides a basic overview of all events, individual cameras can be selected for the evaluation of the recorded events during the course of the day. This view also supports the direct display of the corresponding recordings with the SmartFinder function.

1 Overview

The upper section of the dashboard displays the total number of Line Crossing and Intrusion Detection events stored in the database of the recording system. The bar graph is color-coded and already provides information about the detected object types, such as people or vehicles.

2 Filter

On the right side of the dashboard, filters allow for the limitation of events relevant for further evaluation. Besides the definition of the period of interest, the displayed event types can also be defined here.

3 Camera List

All Panomera® systems and cameras that have detected corresponding events within the set time period are displayed in the middle of the dashboard. In addition to the camera names, graphic symbols for the respective camera type facilitate orientation.

4 Day View

This area displays the events of each camera for each day of the set time period. On the right side the relevant object types for this evaluation can be filtered.

5 Detail View

When a day is selected for a camera in the day view, the corresponding events are displayed in the lower part of the dashboard during the course of the day and colored according to object types. This evaluation shows in detail when and how often the events were triggered by the respective object types.

6 Display

The detailed view can be used directly for the evaluation of the recordings of the events displayed. A click on a column of the diagram transfers the event data to the SmartFinder function, which then allows targeted navigation through the corresponding recordings.

Licensing

The SeMSy® Compact Dashboard function is licensed with a code that is entered on the connected recording system. The recording system also has to have a valid license for the use of comfort functions and maintenance.

SeMSy® Compact Dashboard

SeMSy® Compact Dashboard for graphical display of analysis data Line Crossing, Intrusion Detection and Object Counting in connection with Panomera® Multifocal Sensor Systems and cameras with VCA support

License for SeMSy® Appliance	
007092	DLC - SC Dashboard Support (IPS 10000) License for the use of the SeMSy® Compact Dashboard function (graphical display of the analysis data Line Crossing, Intrusion Detection and Object Counting including object types), only in connection with Dallmeier network cameras and Panomera® systems with VCA support, only in connection with recording systems with a valid license for the use of comfort functions and maintenance



SeMSy® Event Manager

Dallmeier client software for the display and evaluation of status and event messages from Dallmeier recording systems and cameras with activation of the display of associated video streams in SeMSy® Compact

The screenshot displays the SeMSy Event Manager interface. On the left, there's a sidebar with 'Filter' and 'Search Details' sections. The main area shows a table of events with columns: 'Event time', 'Device', 'Camera', 'Message type', 'Action', 'Time/Region', and 'Match objects'. A right-hand pane shows details for a selected event, including 'Message code', 'State', 'Priority', 'Additional Info', 'Device', 'Name', 'IP', 'Camera', 'Analytics', 'Objects', and 'Region'. At the bottom right, there are buttons for 'Live', 'Track', and 'Confirm'.

Event time	Device	Camera	Message type	Action	Time/Region	Match objects
14:17:16.712 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
14:17:16.909 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	13	Analytic - Intrusion Entered	111	Intrusion Zone	person
14:17:02.392 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
14:16:16.952 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
14:16:56.230 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	19	Analytic - Line crossed inward	111	1	person
14:08:18.140 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	19	Analytic - Line crossed inward	111	1	person
14:08:06.302 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
14:02:27.512 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
14:02:16.552 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
14:01:43.032 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
14:01:43.410 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	19	Analytic - Line crossed inward	111	1	person
13:30:43.832 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
13:29:46.104 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	19	Analytic - Line crossed inward	111	Line 1	person
13:29:29.140 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	19	Analytic - Line crossed inward	111	1	person
13:08:05.792 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
13:11:13.110 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	19	Analytic - Line crossed inward	111	1	person
11:43:25.792 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
08:29:48.552 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
07:14:03.932 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		
07:14:30.152 27.06.2023	Mountara ShowRoom (IPS-10000 2.140)	21	Analytic - Lights On	111		

Details for selected event (13:30:43.109 27.06.2023):
Message code: 11115
State: Unconfirmed
Priority: 5
Additional Info: Analytic - Line crossed inward
Device: a ShowRoom (IPS-10000 2.140)
Name: 152.168.2.140
IP: 152.168.2.140
Camera: 13
Analytics: person
Objects: Line 1
Region: Line 1

The SeMSy® Event Manager (SEM) software allows the display and evaluation of status and event messages from Dallmeier recording systems and cameras, which are stored in a local database upon receipt. Individual filter functions allow the focus on messages of interest, while the display of the associated live streams or recordings can be activated in SeMSy® Compact.

Workstation

The SeMSy® Event Manager software is installed and operated on a powerful workstation alongside the Dallmeier client software SeMSy® Compact. The recommended Dallmeier workstation provides sufficient performance for decoding and displaying high-resolution video streams. In this context, the comparatively low requirements for message processing can be neglected.

Encrypted Transmission

The SeMSy® workstation is defined as an alarm host at the relevant recording systems and cameras. The resulting messages are then encrypted (MQTTS/TLS) and transmitted over the network in near real time. The activation of the display at SeMSy® Compact is done via XML commands, while the SeMSy® Event Manager also transmits the access data in encrypted form.

Data Import

The SeMSy® Event Manager allows the import of the access data of all recording systems and cameras created in SeMSy® Compact. A tedious and error-prone double entry of the data is not necessary.

Message Display

The SeMSy® Event Manager displays the received messages in a tabular overview in the main window, which also allows direct triggering of further actions. If this is not necessary, the software can also be operated completely minimized in the task bar.

Licensing

The SeMSy® Event Manager software is licensed via a dongle that is connected to a local workstation or to a central workstation that is always accessible via the network. The dongle included in the scope of delivery is already equipped with the basic license for using the software and a 12-month license for installing updates, which can be extended to up to 60 months.

Optional Licensing

The SeMSy® Event Manager software is installed and operated alongside the Dallmeier client software SeMSy® Compact. If a SeMSy® Compact Pro dongle is already available, it can also be used for licensing the SeMSy® Event Manager software.

Further Features

- Direct configuration of recorder messages
- Panomera® Tracking with Detail Views in SeMSy® Compact
- Activation of the display of presets in SeMSy® Compact

Compatibility

- Operating system Microsoft Windows¹⁾ 10 and 11 Pro 64 bits
- DOMERA® cameras with MQTT support as of version 14.x.x
- Panomera® systems with MQTT support as of version 14.x.x
- Dallmeier network cameras via recording server as proxy
- SMAVIA Recording Server as of version 9.x.13
- SeMSy® Recording Server as of version 10.x.4
- SeMSy® Compact as of version 5.4.23

Best Practice System Requirements

Dallmeier Workstation 4 (Standard) or comparable:

- CPU 8-Core 3,1 GHz
- RAM 32 GB
- SSD 512 GB
- Operating system Microsoft Windows 11 Pro 64 bits

¹⁾ Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation headquartered in Redmond, Washington, USA

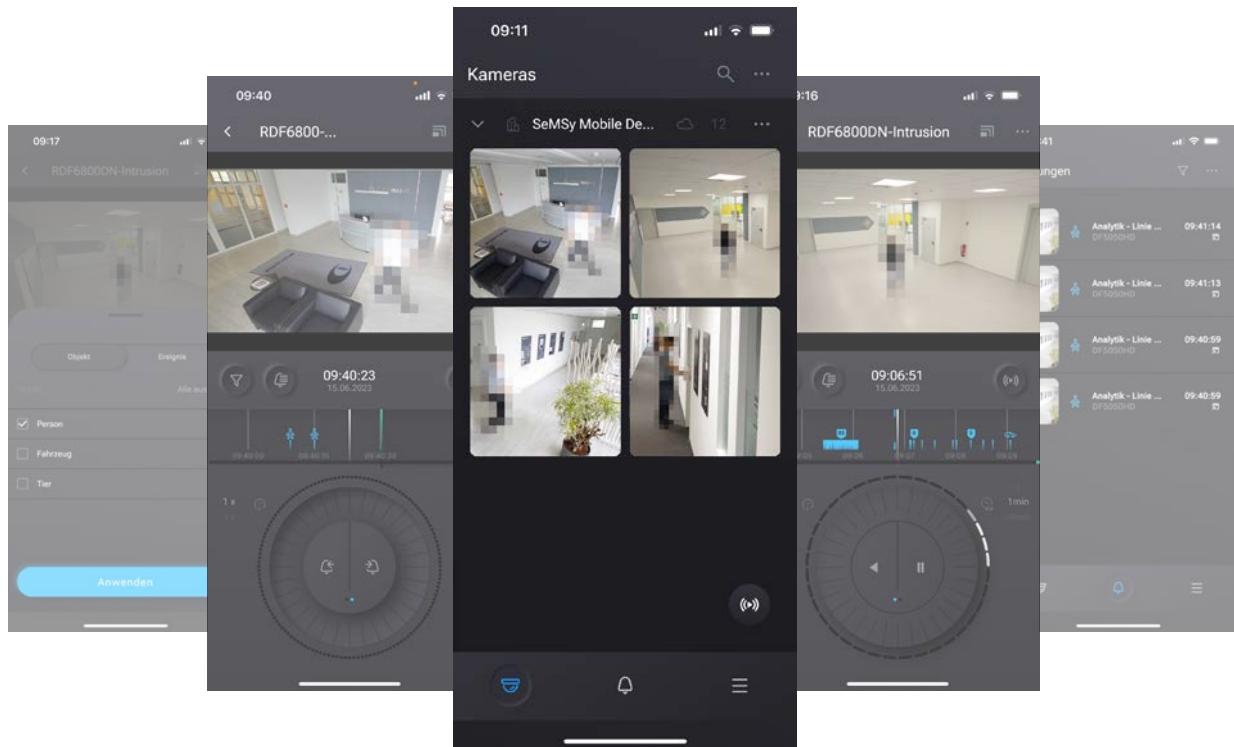
SeMSy® Event Manager

Dallmeier client software for the display and evaluation of status and event messages from Dallmeier recording systems and cameras with activation of the display of associated video streams in SeMSy® Compact

License	
008944.401	SeMSy® Event Manager (Pro Max) License for the use of one instance of the SeMSy® Event Manager software, 12-month license for installation of updates included, 1x Dallmeier License Dongle (Pro Max) included
008944.402	SeMSy® Event Manager (Net 10) License for the use of one instance of the SeMSy® Event Manager software, 12-month license for installation of updates included, expandable with licenses for the use of up to 10 additional instances, 1x Dallmeier License Dongle (Net 10) included
008944.403	SeMSy® Event Manager (No Dongle) License for the use of one instance of the SeMSy® Event Manager software, suitable for the extension of an existing Dallmeier License Dongle, no Dallmeier License Dongle included
Extension for SeMSy® Event Manager network dongle	
009070	DLD - SeMSy® Event Manager Network Dongle Extension Extension of an existing SeMSy® Event Manager network dongle with a license for the operation of SeMSy® Event Manager on an additional instance (workstation), 1x license for Dallmeier License Dongle (Net 10)
Maintenance	
008945	DLD - SeMSy® Event Manager Software Maintenance (Plus 12 Months) License for the installation of security updates and updates for the SeMSy® Event Manager software, duration 12 months, valid for all instances of a SeMSy® Event Manager network dongle, 1x license for Dallmeier License Dongle
008946	DLD - SeMSy® Event Manager Software Maintenance (Total of 60 Months) License for the installation of security updates and updates for the SeMSy® Event Manager software, duration 60 months, valid for all instances of a SeMSy® Event Manager network dongle, 1x license for Dallmeier License Dongle
Workstation	
	009286.401 Workstation 4 Tower (Basic) Workstation, midi tower, Xeon-W 6-Core 2,1GHz CPU, 16GB DDR5 RAM, 512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro (64bit), without HDDs, 1x NVIDIA GeForce RTX 3050 graphics card (decoding and display)
	009157.401 Workstation 4 Tower (Standard) Workstation, midi tower, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 1x power supply 1200 W, 1x keyboard, 1x mouse, 1x license for Microsoft Windows 11 Pro (64bit), without HDDs, 1x NVIDIA T400 graphics card (decoding), 1x NVIDIA GeForce RTX 4060 graphics card (decoding and display)
	009176.401 Workstation 4 Rack-Mount (Standard) Workstation, 4 RU rack-mount, Xeon-W 8-core 3.1GHz CPU, 32 GB DDR5 RAM, 512 GB M.2 SSD, 2x redundant power supply 1200 W, 19" mounting rail kit, 1x license for Microsoft Windows 11 Pro (64bit), without HDDs, 1x NVIDIA T400 graphics card (decoding), 1x NVIDIA GeForce RTX 4060 graphics card (decoding and display)

SeMSy® Mobile Client

SeMSy® Mobile Client for Android or iOS operating systems providing mobile and professional access to Dallmeier camera and recording systems via Dallmeier Connect Service



SeMSy® Mobile Client enables mobile and professional access to Dallmeier camera and recording systems via the Dallmeier Connect Service. After creating an account, the latest Dallmeier cameras can be integrated directly, quickly and easily via a QR code and assigned to a location (site). Current Dallmeier recording systems can be optionally integrated just as easily, which also support access to older camera generations as a link (proxy).

User management & Sharing

The integrated user management of the SeMSy® Mobile Client allows to invite other users directly from the application to access the cameras and recorders of a site. The rights of the individual guests can be individually defined via user roles and, if necessary, revoked again.

Connection & Security

Live access to the video streams is encrypted end-to-end via the Dallmeier Connect Service. Using state-of-the-art technologies saves the time-consuming configuration of firewalls and routers in the local network and ensures maximum system security by avoiding direct connections between the devices involved. The same applies to the playback of the locally stored videos, which are neither edited nor buffered during the entire transport route to ensure the highest data security.

Overview & Information

The cameras of a site are displayed in an overview with refreshable and scalable preview images. After a refresh, this view allows for quick and intuitive information about the overall situation of a site. The individual cameras can be selected for playback mode by tapping on them or switched to display live video directly in the overview by holding down for a longer time.

Playback & Control

After selecting a camera in the overview, it is first displayed with a live image that already supports pinch-to-zoom. The interactive and scalable timeline can be used for initial positioning in the recording by swiping, and allows direct selection of an event by tapping the displayed icons. For convenient playback control with only one hand, the multifunctional track wheel is available, whose step width can be adjusted as well as the playback speed.

Event messages & Push

The status and event messages of the connected cameras and recording systems are transmitted via the Connect Push Service to the Mobile Client, which displays all messages in a clear list and, if necessary, with a preview image of the triggering event. Playback of the event can be activated directly from the message list, which is then clearly displayed in the timeline together with other messages.

Panomera® & Fisheye

All overview, playback and control options are also available for the overview module of Panomera® systems and the latest Dallmeier fisheye cameras. The latter are displayed in overview with the original panoramic view and in playback in a rectified view that supports pinch-to-zoom as well as the positioning of the image section. In full-screen mode, which is achieved by aligning the smartphone horizontally in landscape mode, the fisheye image is available as a rectified and operable panorama.

Note

When using the SeMSy® Mobile Client via the Internet and the Dallmeier Connect Service, additional costs may arise depending on the mobile phone contract.

SeMSy® Mobile Client

SeMSy® Mobile Client for Android or iOS operating systems providing mobile and professional access to Dallmeier camera and recording systems via Dallmeier Connect Service



Further Features

- Quick activation of the video display
- Easy switching of video quality
- Overview with presets for multiple cameras of a site
- Intercom function, if supported by the camera
- Control of lighting, if supported by the camera
- Control of audio output, if supported by the camera
- Control of relays , if supported by the camera
- Operation in the background with push messages as toast notification
- User interface in English, German, French, Italian and Spanish

Included Dallmeier Connect Services

- SeMSy® Connect Access Service
- SeMSy® Connect Streaming Service
- SeMSy® Connect Push Service
- SeMSy® Connect Event Service

Supported Dallmeier systems

- Dallmeier cameras with Domera® OS as of 14.2.0.4
- Dallmeier recording systems with SeMSy® Recording Server as of 10.x.5
- Dallmeier recording systems with SMAVIA Recording Server as of 9.x.14¹⁾
- Further Dallmeier and 3rd party cameras supported via recorder as proxy

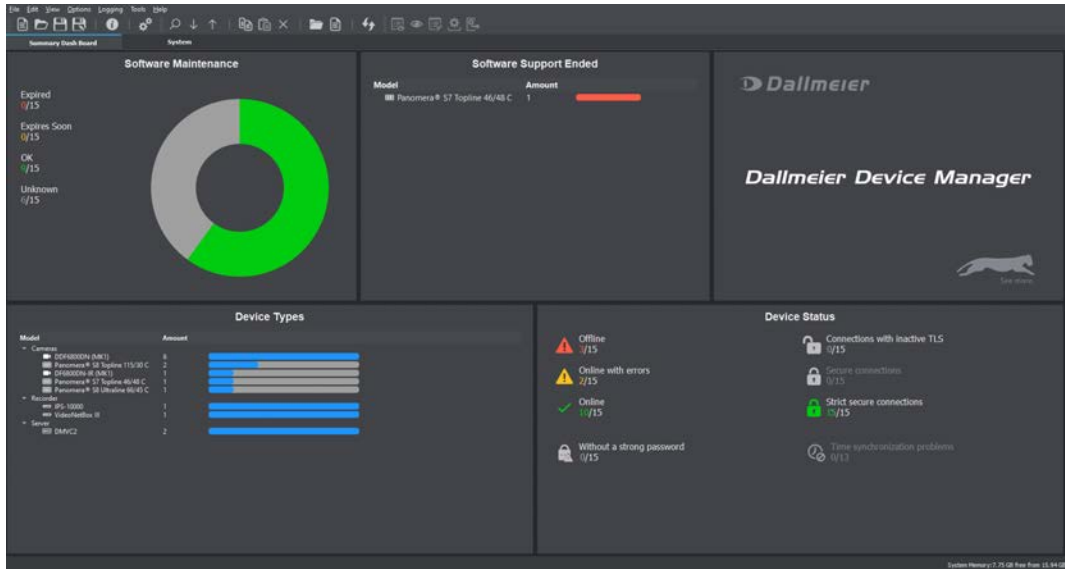
Supported operating systems

- Android 5.0 or higher
- Apple iOS 16.0 or higher

1) The DMS 2400 II recording system, which was discontinued in 2021, is only compatible with SeMSy® Mobile Client after an update to version 9.20.14 SP D. This two-stage update can be made available on request via the Dallmeier support.

Dallmeier Device Manager

Application for Configuration and Management of VideoIP Systems



Dallmeier Device Manager (DDM) is a powerful application for the convenient configuration and administration of large Dallmeier VideoIP systems. DDM scans the video network for Dallmeier devices, detects them automatically and provides them in an overview. Thus, cameras as well as recording systems can be conveniently managed. The extensive functions range from changing IP addresses and updating the integrated software to opening the configuration dialogs directly.

Network Scan

Dallmeier Device Manager scans the VideoIP network for Dallmeier devices and provides them in an overview, if desired with a preview for cameras and filtered according to various criteria.

Structuring

The independent and simple assignment of the detected recording systems and cameras to different virtual systems allows a clear and structured representation of the entire VideoIP system.

Dashboard

The dashboard shows the most important device data of a system at a glance: Hardware and security status, licenses, software version.

Updates

Software updates for all components present in the network can be carried out with DDM. Devices with identical software versions can be updated simultaneously.

Software Maintenance

The current status of the maintenance license intervals is queried and displayed in a general overview for all devices. Soon expiring licenses are highlighted.

TLS Encryption

DDM provides all the necessary tools to encrypt device connections in a network using the TLS protocol.

Panomera® AutoCalibration

The Panomera® AutoCalibration add-on enables the automatic calibration of Panomera® systems. The individual sensors of the system are optimally aligned against each other by a digital fine alignment of the image section to achieve a seamless overall image.

Further Features

- Compatible with all Dallmeier recording systems
- Compatible with all Panomera® multifocal sensor systems
- Compatible with all Dallmeier network cameras

System Requirements¹⁾

- Operating system Microsoft Windows²⁾ 10 or 11 (64 Bit)
- CPU Intel³⁾ Core2Quad 2.66 GHz (or comparable)
- RAM 8 GB
- Ethernet 100/1000 Mbps
- Router / Switch with broadcast support
- Nvidia⁴⁾ graphics card with CUDA 3.0 or 5.0 support (only required with Panomera® AutoCalibration)
- Screen resolution at least 1280 × 800 px, recommended 1920 × 1080 px
- Screen resolution for AutoCalibration at least 1920 × 1080 px

1) These requirements relate to the use of the Panomera® AutoCalibration add-on.

If this add-on is not used, workstations with the following or comparable equipment can be employed: Microsoft Windows 10, CPU Intel Core2Duo 2.0 GHz, RAM 2 GB.

2) Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation headquartered in Redmond, Washington, USA

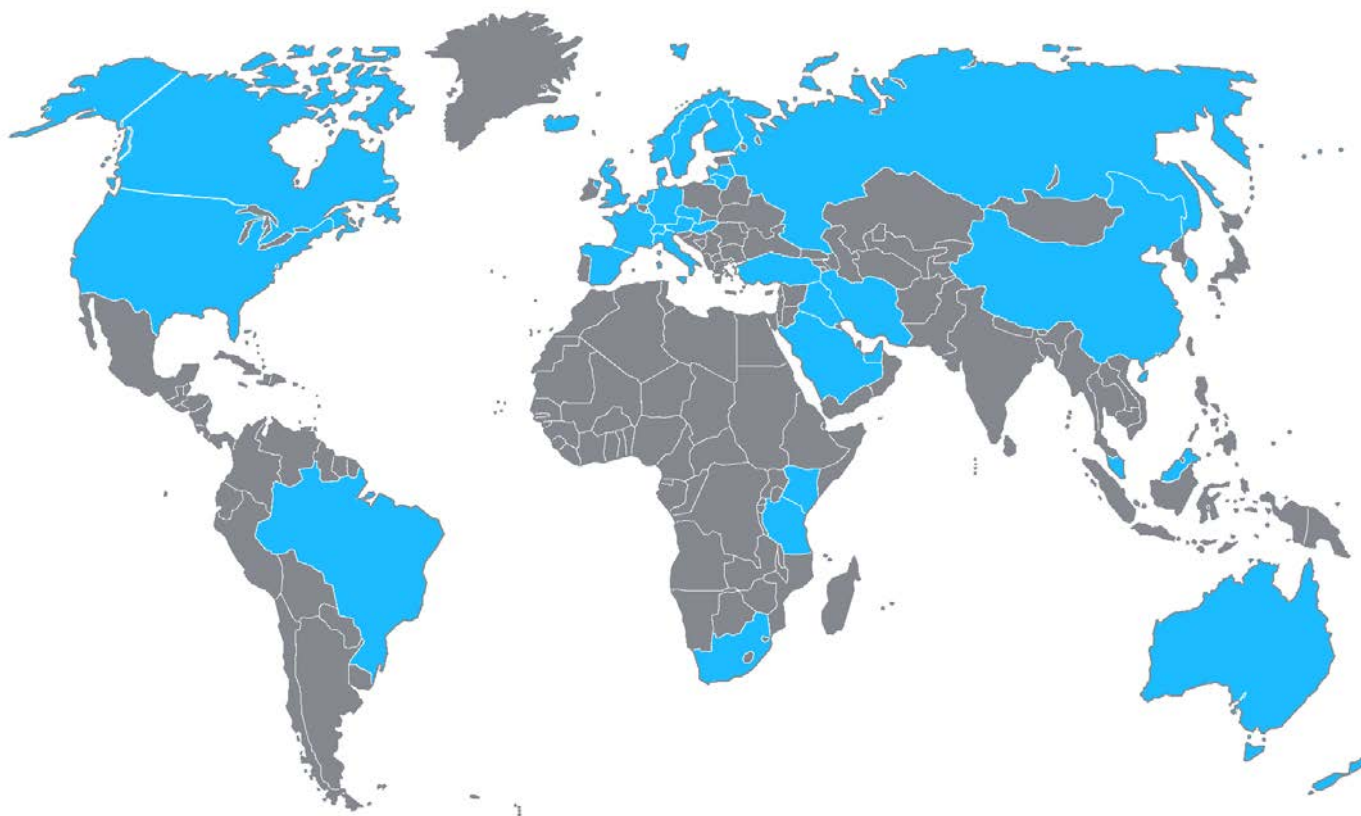
3) Intel is a trademark or registered trademark of Intel Corporation headquartered in Santa Clara, California, USA

4) Nvidia is a trademark or registered trademark of Nvidia Corporation headquartered in Santa Clara, California, USA

Notes

[illegible]

Dallmeier Worldwide



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See more.