# Panomera® V8 Area

Multifocal Sensor System, 30 fps, H.265, day/night, UWDR, field of view horizontal 180° and vertical 90°, Panomera® View Package (included), AI EdgeAnalytics (optional), variable Mountera® mounting system

reddot winner 2026
best of the best

DESIGN AWARD 2026



150 MPe | 20 m | >250 px/m | Identification Distance
150 MPe | 40 m | >125 px/m | Recognition Distance
150 MPe | 80 m | >62 px/m | Observation Distance
Domera® OS
Deep AI
180° View
0° Blind Spot
UWDR
Privacy
Security
NDAA Compliant

ONVIF | MST

Panomera® V8 combines the range and resolution of the proven Panomera® S series with the viewing angle of the W series. The innovative arrangement of the image sensors enables a **180° field of view with maximum resolution**. Since there is **no blind spot** to consider during installation, comprehensive video surveillance of areas **up to 10,000 square meters** is possible from a single location. This means that **a single Panomera® V8** can replace several cameras in conventional systems and **significantly reduce infrastructure requirements**.

## Panomera® Grand View Package (included)

The **Panomera® Grand View imaging process** described in the patent combines the video streams from multiple image sensors in a unique way to create a **continuous, high-resolution overall view**. The individual streams are **geometrically aligned and corrected with precision**. Additional algorithmic corrections ensure **seamless transitions** and **harmonized brightness and color reproduction**. This gives the user a **panoramic overall view of the action**, enabling **dynamic and multiple zooming** into **high-resolution detail areas - without losing the overall view**.

## AI EdgeAnalytics Essentials Package (optional)

Panomera® V8 is equipped with an **intensively trained neural network**. This analyzes the captured images independently of background movements (green spaces, bodies of water, etc.) and reliably classifies defined objects (people, vehicles, etc.) in real time. The **EdgeAnalytics AI apps** use this raw data to evaluate the captured events according to the specific criteria of various use cases, such as Line Crossing or Object Counting. The generated event messages and values supplement the raw data already contained in the video stream and can be displayed and evaluated using Dallmeier client software.

## Complete 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.

## Domera® OS

The sensors of the Panomera® 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.

## Further features

- Dewarped display with Dallmeier client software supported
- EdgeStorage (buffer) and SmartBackfill 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

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## Panomera® V8 Area



**009488** **Panomera® V8 150/180 DN**
Multifocal sensor system, 150 MPe, 30 fps, H.265, day/night, UWDR, field of view horizontal 180° and vertical 90°, resolution 125 px/m up to 40 m, Panomera® Grand View Package included, AI EdgeAnalytics Essentials Package optional

## Accessories



**007054** **Mountera® Box with PSU**
Mountera® Box with power supply unit, 48 V DC, 5.4 A, 260 W, IP69, white



**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 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



**009489** **Panomera® V8 Sunshield**
Two-piece sun shield for a Panomera® V8, silicone, weather-resistant, black

## Adapter



**009648** **Mountera® In-Ceiling Adapter V8**
Mountera® adapter for the installation of a Panomera® V8 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, 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.

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## Included Maintenance, Warranty and Licenses

**DCP - Camera Software Maintenance**
License for the update of Domera® OS with bug fixes, feature updates, feature upgrades and security updates[2] for 5 years, license for the update of the neural network for object classification for 5 years

**DCP - Camera Hardware Warranty**
Bring-in warranty of 2 years

**DLC - Panomera® Grand View Package**
License for the use of the Panomera® Grand View Package for the combination of video streams into a distorted overall view

**DLC - AI Essentials Apps (30 Days)**
License for the use of the EdgeAnalytics AI Essentials 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 with a runtime of 30 days (test function)

**DLC - VCA Functions**
License for the use of the VCA function (VCA Motion Detection, VCA Tamper Detection, VCA Intrusion Detection, VCA Line Crossing) based on motion detection

## Optional Maintenance (after the included 5 years - maximum 10 years)

| | |
|---|---|
| 008790 | **DCP - Panomera® S/W/V 8 Software Maintenance (Plus 1 Year)**<br>License for the update of Domera® OS with updates, upgrades and security updates[2] for 1 year, license for the update of neural networks for object classification for 1 year |
| 009605 | **DCP - Panomera® S/W/V 8 Software Maintenance (Plus 5 Years)**<br>License for the update of Domera® OS with updates, upgrades and security updates[2] for 5 years, license for the update of neural networks for object classification for 5 years |

## Optional Warranty (after the included 2 years - maximum 5 years)

| | |
|---|---|
| 008791 | **DCP - Panomera® S/W/V 8 Hardware Warranty (Plus 3 Years)**<br>Extension of the bring-in warranty within the included 2 years to a total of 5 years |
| 009219 | **DCP - Panomera® S/W/V 8 Hardware Warranty (Plus 3 Years) and AI Essentials Apps**<br>Extension of the bring-in warranty within the included 2 years to a total of 5 years, license for the use of EdgeAnalytics AI Essentials 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 |

## Optional Licenses

| | |
|---|---|
| 008792 | **DLC - Panomera® S/W/V 8 AI Essentials Apps**<br>License for the use of EdgeAnalytics AI Essentials 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 |
| 009295 | **DLC – Panomera® S/W/V 8 AI High Resolution Counting App**<br>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® S/V 8 AI Perimeter App Package**<br>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. |
| 009505 | **DLC – Panomera® S/W/V 8 AI Person Attributes App**<br>License for the use of the AI Person Attributes neural network to determine the attributes of persons (upper body color, lower body color, headgear, bag/backpack, short/long pants/sleeves) in the entire captured image. License for the use of the EdgeAnalytics AI Person Attributes App for merging and linking the analysis data on a Panomera® S/W/V 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.

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| Sensor System | |
|---|---|
| Type of sensors | CMOS |
| Number of sensors | 8 |
| Number of sensor pixels | 96 MP |
| Light sensitivity | <0.0005 lux |
| Dynamic range (UWDR) | 130 dB (effective) |

| Resolution | |
|---|---|
| Effective resolution (MPe)[3] | Up to 150 MP |
| Identification distance (≥250 px/m) | Up to 20 m (628 m²) |
| Recognition distance (≥125 px/m) | Up to 40 m (2,513 m²) |
| Observation distance (≥62 px/m) | Up to 80 m (10,053 m²) |

| Installation Height | |
|---|---|
| Recommended | 5 m |
| Permissible | 3.5 - 15 m |

| Field of View | |
|---|---|
| Horizontal field of view | 180° |
| Vertical field of view | 90° |

| Format and Encoding | |
|---|---|
| Video compression | H.264, H.265, MJPEG |
| Frame rate | Up to 30 fps at full resolution |
| Live streaming | Multicast or Unicast (for Viewing Client)<br>Unicast (for recording) |

| Network and Recording | |
|---|---|
| Required network bandwidth[4] | 128 Mbps (nominal, for recording) |
| Recommended network bandwidth | 1,000 Mbps |

| Functions | |
|---|---|
| Operating system | Domera® OS |
| Secure Boot [5] | Supported (activation optional) |
| Day/Night switching | Ambient light sensing and removable IR cut filter (ICR) |
| Black-and-white mode | Automatic (at low light or in night mode) |
| Digital noise reduction | 3D-DNR |
| Brightness control | Automatic (ALC) |
| Gain control | Automatic (AGC) |
| White balance | Automatic (AWB) |
| Privacy Zone Masking | Hiding/masking of up to 16 protected areas per sensor (up to 100% of the entire image) |
| Video Content Analysis (VCA) | VCA Motion Detection, VCA Tamper Detection, VCA Intrusion Detection, VCA Line Crossing |
| EdgeAnalytics AI Apps (Essentials)[6] | AI Motion Detection, AI Tamper Detection, AI Loitering Detection, AI Intrusion Detection, AI Line Crossing, AI Vehicle Parking |
| EdgeAnalytics Object Classes | Person, animal, car, large vehicle, two-wheeler |
| EdgeAnalytics Actions | Notification via DaVid/PGuard, switching of network relays, message via MQTT/HTTP |

| Protocols | |
|---|---|
| Ethernet protocols | IPv4 (ARP, ICMP, IGMPv2/IGMPv3), UDP, TCP, LLDP, CDP (v1, v2), DSCP (QoS), DNS, NTP, HTTP/HTTPS, RTSP/RTP/RTCP, SNMP (v1, v2c, v3), MQTT |
| Ethernet protocols in preparation | IPv6 (NDP, ICMPv6, MLDv1/MLDv2, SLAAC, RDNSS), UDPv6, TCPv6, DHCPv6, LDAP |
| Communication protocols | DaVid, DaVidS, ONVIF Profile M, ONVIF Profile S, Profile T, SNMP (v1, v2c, v3) |
| Security | HTTPS encryption with TLS 1.2 and TLS 1.3, network access control according to IEEE 802.1X |

3) Effective resolution (MPe) compared to a conventional 360° fisheye camera.
4) This value is based on the encoding of each sensor with 16 Mbps and the use of the recording system as a proxy for the live view.
5) Once Secure Boot has been activated, it is no longer possible to downgrade to an older version of the operating system that does not support Secure Boot.
6) Optional licenseDLC - Panomera® S/W/V 8 AI Essentials Apps required.

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| Connections | |
|---|---|
| Ethernet 1 | Telegärtner STX V4 socket with STX RJ45 coupling Cat.6 for 1000BASE-T (1,000 Mbps) |
| Ethernet 2 | Telegärtner STX V4 socket with STX RJ45 coupling Cat.6 for 1000BASE-T (100 Mbps, service port) |
| Power IN | HARTING connector (5-pole) |

| Electrical Data | |
|---|---|
| Voltage supply | Camera: 48 V DC ±5%<br>Heater: 48 V DC ±5% |
| Power consumption | Camera: Max. 80 W<br>Heater: Max. 60 W |

| Mechanical Data | |
|---|---|
| Dimensions (W × H × D) | Approx. 245 × 440 × 245 mm (9.6 × 17.3 × 9.6 inches) |
| Weight | Approx. 10 kg (22 lb) |
| Material | Aluminium |
| Processing | Chromated |
| Finish | Powder coating, tested for seawater resistance according to DIN EN 60068-2 |
| Color[7)] | Signal white (RAL 9003), housing<br>Signal black (RAL 9004), sensor unit |
| Adjustment | Stepless alignment on 3-axes up to ±5° |
| IK protection | IK10 |
| IP rating | IP69 |

| Environmental Conditions | |
|---|---|
| Installation sites | Indoor and outdoor |
| Operating temperature | −40 °C to +55 °C (-40°F to +131°F) (peak up to +60°C (+140°F), not permanent) |
| Minimum start-up temperature | > −30 °C (-22°F) |
| Heater On | < +10 °C (+50°F) |
| Heater Off | > +10 °C (+50°F) |
| Relative humidity | 0% – 90% RH, non-condensing |

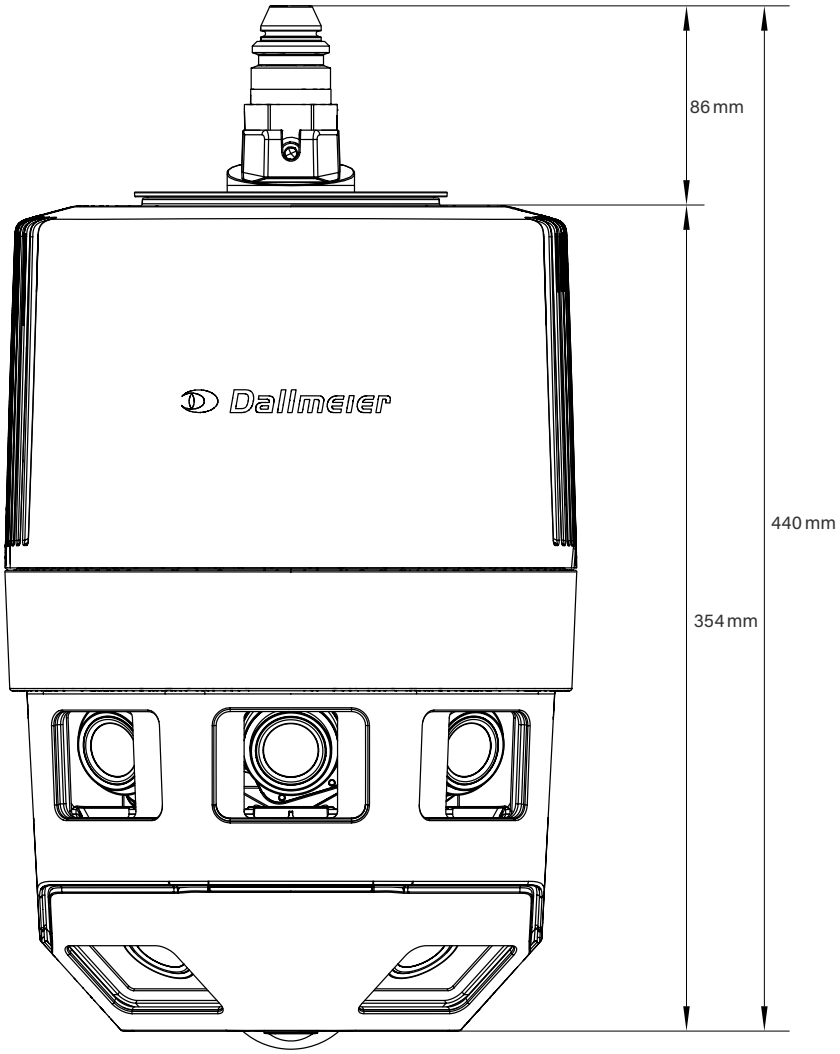
| Miscellaneous | |
|---|---|
| Security module | Integrated (fTPM) |
| Ambient light sensor | Integrated |
| Removable IR-cut filter | Integrated |
| Local memory | 50 MB RAM memory per sensor |
| Configuration and live video | Via web browser (all major platforms),<br>Dallmeier Device Manager (with Panomera® AutoCalibration add-on) |
| Languages | German, English |
| Programming interface | Open platform for integration into 3rd party systems using API |
| ONVIF compliance | Profile M, Profile S, Profile T |
| GDPR compliance | Supported |
| NDAA compliance | Supported |

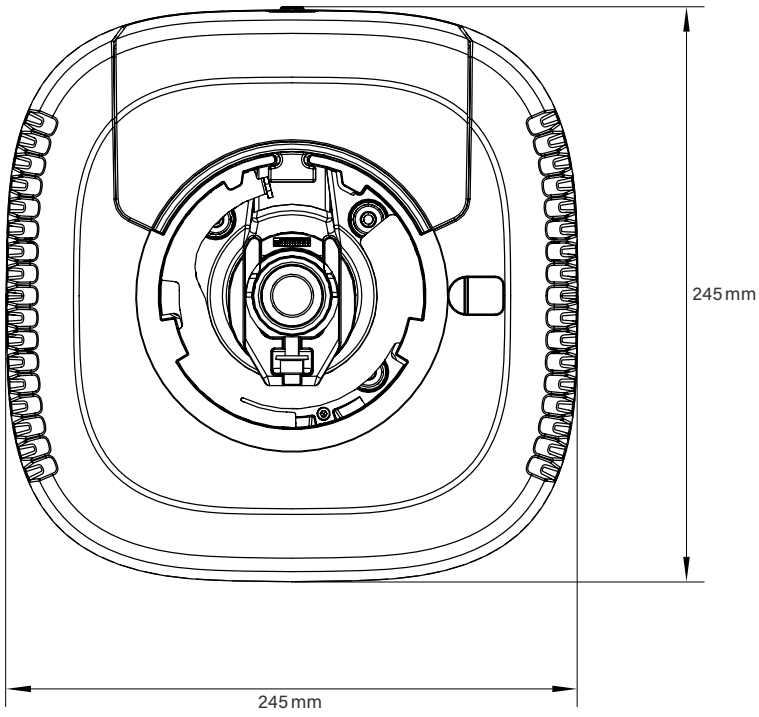
| Approvals/Certifications | |
|---|---|
| Type | CE, FCC, RCM, DIN EN 50130-4 compliant |

7) The color of the powder coating may differ slightly from the RAL color indicated. This is due to production and does not constitute a defect.

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