IP Network Dome Camera, Vandal-resistant, 5-Megapixel, Full High-Definition, 1080p/30, Day/Night, PoE













The DDF4910HDV-DN is a 5-megapixel High-Definition IP network dome camera with Dallmeier Cam_inPIX® technology built into a vandal-resistant (IK10) enclosure. The camera provides real-time Full HD video (1080p/30) using the H.264 codec that is currently the most sophisticated standard for high-efficiency video compression.

Besides a comprehensive set of automatic and manual image optimization functions and many other setting options, it features automatic **Day/Night** operation supported by integrated **ambient light sensing** and a **removable IR cut filter (ICR**¹⁾).

According to requirements, the camera can be supplied conventionally with 12 V DC or conveniently operated via **Power over Ethernet** (PoE Class 0, IEEE 802.3af) which allows for an easy, quick and cost-effective installation.

Features

- 1/2.5" 5-megapixel CMOS image sensor with Cam_inPIX® technology
- Pure Digital Signal Processing
- Real-time Full HD video (1080p/30)
- Automatic Day/Night switching using ambient light sensing and ICR¹⁾ function (switching threshold level adjustable)
- High light sensitivity of 0.45 lux (at F0.95, 50 IRE, ICR¹⁾ On)
- Resolution: SD (up to D1), HD (720p, 1080p, 2MP, 3MP, 4MP, 5MP)
- Video compression: H.264, MJPEG
- Frame rate up to 30 fps
- Simultaneous Dual- or Tri-Streaming
- Automatic White Balance (ATW, One-Push AWB)
- Automatic Gain Control (AGC)
- Automatic Electronic Shutter (AES)
- Comprehensive set of image optimization functions like brightness, contrast, saturation and sharpness
- 3D Digital Noise Reduction (3D DNR)
- Three different exposure metering modes:
 Average metering (light information from entire scene),
 Centre-weighted average metering and Spot metering

- Privacy Zone Masking (hiding/masking of protected areas)
- Flip function (horizontal, vertical or both)
- Digital Image Shift²⁾
- Motion detection³⁾ with selectable sensitivity
- Alarm notification via DaVid protocol³⁾, e-mail and FTP image upload
- Local video memory: SDHC card slot integrated³⁾
- Hybrid IP camera with analogue preview output
- Audio OUT⁴⁾ / Microphone IN⁴⁾
- Voltage supply with 12 V DC or via PoE (Class 0, IEEE 802.3af)
- Low power consumption (max. 4.5 W)
- 3-axis adjustment
- Two available mounting variants: in-ceiling mount (IM) or surface mount (SM)
- Available with different lens types
- Compact vandal-resistant (IK10) housing
- IP67 (surface mount variant)
- ONVIF compliant
- DIN EN 50130-4 compliant

Variants

003474.403 DDF4910HDV-DN-IM

IP network dome camera, vandal-resistant, 5-megapixel, Full HD, 1080p/30, Day/Night, PoE, in-ceiling mount variant, F1.8 / 1.8 – 3 mm

003473.403 DDF4910HDV-DN-SM

IP network dome camera, vandal-resistant, 5-megapixel, Full HD, 1080p/30, Day/Night, PoE, surface mount variant, F1.8 / 1.8 – 3 mm

003474.404 DDF4910HDV-DN-IM

IP network dome camera, vandal-resistant, 5-megapixel, Full HD, 1080p/30, Day/Night, PoE, in-ceiling mount variant, F1.5 / 9 – 40 mm

003473.404 DDF4910HDV-DN-SM
IP network dome camera, vandal-resistant, 5-megapixel, Full HD, 1080p/30, Day/Night, PoE, surface mount variant, F1.5 / 9-40 mm

DDF4910HDV-DN-IM
IP network dome camera, vandal-resistant, 5-megapixel, Full HD, 1080p/30, Day/Night, PoE, in-ceiling mount variant, F1.8 / 3.9 – 10 mm

003473.405 DDF4910HDV-DN-SM

IP network dome camera, vandal-resistant, 5-megapixel, Full HD, 1080p/30, Day/Night, PoE, surface mount variant, F1.8 / 3.9 – 10 mm

Options

003474.405

000428 Design Colours IM Cover Ring

Cover ring for in-ceiling mount variant according to RAL or Pantone colour chart

001044 Tinted Bubble

For in-ceiling and surface mount variant, 4.5"

001431 EvC-

High-Speed Ethernet data transmission via coaxial cable

001678 Power Supply Unit (110-240 V AC -> 12 V DC)

Universal power supply, 110–240 V AC to 12 V DC, 850 mA, plug adapter EU/UK/US/AUS

003694 Audio IN/OUT Y-Cable Connector FGA-30

3.5 mm stereo plug to 2× RCA jack incl. galvanic isolation

- 1) ICR = IR Cut Filter Removable
- 2) Provides digital fine alignment of image section (only applicable at resolutions less than 5MP)
- Frovides digital line aligni
 Function is in preparation.
- 4) Audio IN/OUT Y-Cable Connector FGA-30 required (optionally available)

DDF4910HDV-DN

3D Digital Noise Reduction (3D DNR)

IP Network Dome Camera, Vandal-resistant, 5-Megapixel, Full High-Definition, 1080p/30, Day/Night, PoE

Specifications

Sensor

1/2.5" 5-megapixel CMOS image sensor with Cam_inPIX® technology Type

Pure Digital Signal Processing Signal processing

Image capture Progressive Scan

ICR⁵) Off: 0.59 lux (F0.95, 50 IRE) Minimum illumination ICR⁵⁾ On: 0.45 lux (F0.95, 50 IRE)

Dynamic Range Max. 70 dB6)

Functions

Day/Night switching Using ambient light sensing and ICR5) function (switching threshold level adjustable)

B/W (black-and-white) mode Automatic (in Night mode)

Automatic Electronic Shutter (AES) 1/30 – 1/2500 s (Auto Slow Shutter extends maximum exposure time to 1/5 s with AE Preset "Low light")

On/Off

Automatic Exposure (AE) Presets Outdoor, Indoor, Low light

Exposure metering mode Average metering (light information from entire scene), Centre-weighted average metering, Spot metering

Brightness adjustment Automatic (ALC)/Manual

Gain control Automatic (AGC)

White balance ATW (Auto Tracking White Balance), One-Push AWB (Automatic White Balance)

Privacy Zone Masking Yes (max. 20% of entire image) Flip function Horizontal, vertical or both

Digital Image Shift7)

Motion detection⁸⁾ (VMD) With selectable sensitivity (5 levels)

Alarm notification Via DaVid protocol (Dallmeier Video Protocol) to PGuard advance⁸⁾, e-mail, FTP image upload

Configuration Via web browser Languages

English, German, French, Spanish, Italian

Lens

Mount

Auto iris control Compatible with DC drive auto iris lenses

Specifications and available angles of view depending on variant (see "Lens Types" on page 3) Type

Format and Encoding

SDTV (PAL/NTSC), HDTV (SMPTE 296M, SMPTE 274M) Video standard SD (up to D1), HD (720p, 1080p, 2MP, 3MP, 4MP, 5MP) Resolution

H.264, MJPEG Video compression

Audio compression G.711

Up to 30 fps at D1 Frame rate

Up to 30 fps at 720p Up to 30 fps at 1080p Up to 30 fps at 2MP Up to 15 fps at 3MP Up to 10 fps at 4MP

Up to 10 fps at 5MP 0.25-10 Mbps, CBR (constant bit rate) or VBR (variable bit rate)

Video bit rate Audio bit rate

Video streaming Simultaneous Dual- or Tri-Streaming: H.264, MJPEG

Progressive (full image) Transfer format Unicast, Multicast Live streaming transmission method

Miscellaneous Ambient light sensor

Integrated

1× BNC (CVBS, analogue SD video preview output, for local installation only) Video output

Audio OUT (Mono) / Microphone IN (Mono) 1× 3.5 mm phone jack (for stereo plug)9)

Mic IN: max. 63 mV (RMS), input resistance 10 kOhm, internal gain 20 dB

SDHC card slot integrated8)

Local video memory Ethernet 1× RJ45, 10BASE-T-/100BASE-TX-PoE

IPv4, TCP, UDP, ARP, ICMP, DHCP, NTP, HTTP, RTSP, IGMP V2, FTP, SMTP, RTCP Ethernet protocols

Electrical Data

Voltage supply 12V DC ±10%, PoE (Class 0)

IFFF 802 3af PoE standard Power consumption Max. 4.5 W

Mechanical Data

Dimensions In-ceiling mount variant: approx. Ø170×H135mm (Ø6.7×H5.3 inches) Surface mount variant: approx. Ø 153 × H135 mm (Ø 6.0 × H5.3 inches)

Weight In-ceiling mount variant: approx. 1200 g (2.6 lb) Surface mount variant: approx. 1100 g (2.4 lb)

Adjustment 3-axis

Colour White (standard variant)

Bubble Clear (with black inner liner for discrete surveillance)

Environmental Conditions

Operating temperature In-ceiling mount variant (indoor): 0°C to +35°C (32°F to 95°F) Surface mount variant (in- and outdoor): -10°C to +40°C (14°F to 104°F)

Relative humidity 0% - 90% RH, non-condensing IP67 (surface mount variant) IP rating

Approvals/Certifications

CE, FCC, ACA, UVV-Kassen, DIN EN 50130-4 compliant Type

- ICR = IR Cut Filter Removable
- According to the sensor manufacturer's specifications
- Provides digital fine alignment of image section (only applicable at resolutions less than 5MP)
- Function is in preparation.
- Audio IN/OUT Y-Cable Connector FGA-30 required (optionally available).

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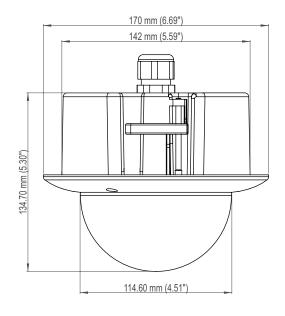
Lens Types

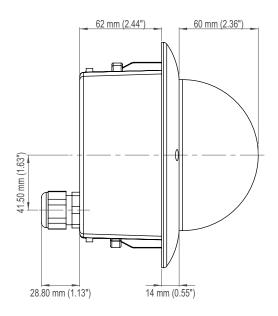
Lens F1.8 / 3.9-10 mm	
Туре	5-Megapixel varifocal lens
Format	1/2"
Mount	CS-mount
Focal length	3.9-10 mm
Iris range	F1.8-360
Iris control	DC auto iris
Zoom	Manual
Focus	Manual
MOD (Minimum Object Distance)	0.3 m
IR corrected	Yes
Available angles of view ¹⁰⁾ (H×V) at wide end	approx. 62° × 44° at D1 NTSC approx. 62° × 52° at D1 PAL approx. 71° × 44° at 720p approx. 56° × 33° at 1080p approx. 48° × 37° at 2MP approx. 60° × 46° at 3MP approx. 66° × 52° at 4MP approx. 72° × 57° at 5MP
Available angles of view ¹⁰⁾ (H×V) at tele end	approx. 26° × 18° at D1 NTSC approx. 26° × 21° at D1 PAL approx. 31° × 18° at 720p approx. 23° × 13° at 1080p approx. 20° × 15° at 2MP approx. 25° × 19° at 3MP approx. 28° × 21° at 4MP approx. 31° × 24° at 5MP

Ultra Wide-Angle Lens F1.8 / 1.8-3 mm	
Туре	5-Megapixel varifocal lens
Format	1/2.5"
Mount	CS-mount
Focal length	1.8-3 mm
Iris range	F1.8-Closed
Iris control	DC auto iris
Zoom	Manual
Focus	Manual
MOD (Minimum Object Distance)	0.5 m
IR corrected	Yes
Available angles of view ¹⁰⁾ (H×V) at wide end	approx. 105° × 82° at D1 NTSC approx. 105° × 93° at D1 PAL approx. 114° × 82° at 720p approx. 99° × 66° at 1080p approx. 88° × 72° at 2MP approx. 102° × 86° at 3MP approx. 110° × 93° at 4MP approx. 115° × 99° at 5MP
Available angles of view ¹⁰⁾ (H×V) at tele end	approx. 76° × 55° at D1 NTSC approx. 76° × 64° at D1 PAL approx. 86° × 55° at 720p approx. 70° × 43° at 1080p approx. 60° × 47° at 2MP approx. 73° × 58° at 3MP approx. 81° × 65° at 4MP approx. 87° × 71° at 5MP

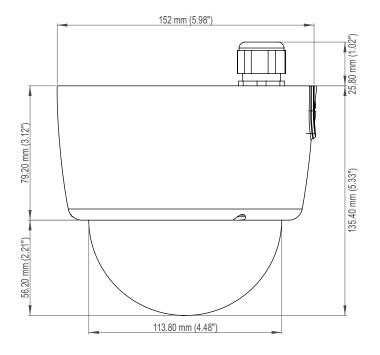
Telephoto Lens F1.5 / 9-40 mm	
Туре	5-Megapixel varifocal lens
Format	1/2.5"
Mount	CS-mount
Focal length	9-40 mm
Iris range	F1.5-Closed
Iris control	DC auto iris
Zoom	Manual
Focus	Manual
MOD (Minimum Object Distance)	2.0 m
IR corrected	Yes
Available angles of view $^{10)}(H\times V)$ at wide end	approx. 29° × 20° at D1 NTSC approx. 29° × 23° at D1 PAL approx. 34° × 20° at 720p approx. 26° × 15° at 1080p approx. 22° × 16° at 2MP approx. 28° × 21° at 3MP approx. 31° × 24° at 4MP approx. 35° × 26° at 5MP
Available angles of view $^{10)}(\text{H}\text{x}\text{V})$ at tele end	approx. 6° × 4° at D1 NTSC approx. 6° × 5° at D1 PAL approx. 8° × 4° at 720p approx. 6° × 3° at 1080p approx. 5° × 3° at 2MP approx. 6° × 4° at 3MP approx. 7° × 5° at 4MP approx. 8° × 6° at 5MP

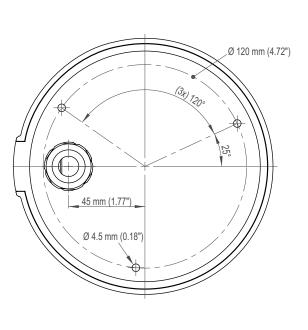
Dimensions





In-ceiling mount variant





Surface mount variant