IP Network Box Camera, 2-Megapixel, High-Definition, 720p/30, PoE











The ideal entry into the world of HD!

The DF4510HD is a 2-megapixel High-Definition IP network box camera with Dallmeier Cam_inPIX® technology.

The camera provides **real-time HD video (720p/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, the camera features many other setting options, especially useful for demanding surveillance applications.

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 HD video (720p/30)
- High light sensitivity of 0.59 lux (at F0.95, 50 IRE)
- Resolution: SD (up to D1), HD (720p, 2MP)
- 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 Shift¹⁾
- Motion detection²⁾ with selectable sensitivity
- Alarm notification via DaVid protocol²), e-mail and FTP image upload
- Local video memory: SDHC card slot integrated²⁾
- Hybrid IP camera with analogue preview output
- Audio OUT³⁾ / Microphone IN³⁾
- Voltage supply with 12 V DC or via PoE (Class 0, IEEE 802.3af)
- Low power consumption (max. 4.5 W)
- Different lens types optionally available
- Compact and lightweight housing
- ONVIF compliant
- DIN EN 50130-4 compliant

Variants

003482 DF4510HD

IP network box camera, 2-megapixel, HD, 720p/30, PoE, grey, w/o lens

Options

002946 Lens F1.8 / 3.9-10 mm

1/2", 5-megapixel, varifocal, Day/Night, DC auto iris, CS-mount

001602 Lens F1.8 / 1.8-3 mm

Ultra wide-angle, 1/2.5", 5-megapixel, varifocal, Day/Night, DC auto iris, CS-mount

002907 Lens F1.5 / 9-40 mm

Telephoto, 1/2.5", 5-megapixel, varifocal, Day/Night, DC auto iris, CS-mount

001431 EvC-1

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

Mounting appliances

003952 Wall Mount Bracket Indoor (HD Box)

Grey, 1/4" tripod screw, for HD box cameras

- 1) Provides digital fine alignment of image section
- Function is in preparation.
- 3) Audio IN/OUT Y-Cable Connector FGA-30 required (optionally available).

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DF4510HD

IP Network Box Camera, 2-Megapixel, High-Definition, 720p/30, 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 0.59 lux (F0.95, 50 IRE) Minimum illumination

Dynamic Range Max. 70 dB⁴⁾

Functions

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 3D Digital Noise Reduction (3D DNR)

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 Shift⁵⁾

Motion detection⁶⁾ (VMD) With selectable sensitivity (5 levels)

Via DaVid protocol (Dallmeier Video Protocol) to PGuard advance⁶⁾, e-mail, FTP image upload Alarm notification

Configuration Via web browser

Languages English, German, French, Spanish, Italian

Lens

CS-mount Mount

Auto iris control Compatible with DC drive auto iris lenses

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

Format and Encoding

Video standard SDTV (PAL/NTSC), HDTV (SMPTE 296M)

SD (up to D1), HD (720p, 2MP) Resolution

Video compression H.264, MJPEG

Audio compression G.711

Frame rate Up to 30 fps at D1 Up to 30 fps at 720p

Up to 15 fps at 2MP (MJPEG)

Video bit rate 0.25-10 Mbps, CBR (constant bit rate) or VBR (variable bit rate)

Audio bit rate

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

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

Miscellaneous

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

1× 3.5 mm phone jack (for stereo plug)7) Audio OUT (Mono) / Microphone IN (Mono)

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

Local video memory SDHC card slot integrated6)

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

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

Electrical Data

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

PoE standard IEEE 802.3af Power consumption Max. 4.5 W

Mechanical Data

Colour

Dimensions Approx. W71×H66×L118mm (W2.8×H2.6×L4.6 inches) w/o lens

Approx. 300 g (0.7 lb) Weight

Grey

Environmental Conditions

-10°C to +45°C (14°F to 113°F) Operating temperature Relative humidity 0% - 90% RH, non-condensing

Approvals/Certifications

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

- According to the sensor manufacturer's specifications
- Provides digital fine alignment of image section
- Audio IN/OUT Y-Cable Connector FGA-30 required (optionally available)

DF4510HD

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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 $^{\!8)}(\text{H}\text{\times}\text{V})$ at wide end	approx. 62° ×44° at D1 NTSC approx. 62° ×52° at D1 PAL approx. 71° ×44° at 720p approx. 48° ×37° at 2MP
Available angles of view $^{\!8)}(\text{H}\text{\times}\text{V})$ at tele end	approx. 26° × 18° at D1 NTSC approx. 26° × 21° at D1 PAL approx. 31° × 18° at 720p approx. 20° × 15° at 2MP

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 $^{8)}$ (H × V) at wide end	approx. 105° × 82° at D1 NTSC approx. 105° × 93° at D1 PAL approx. 114° × 82° at 720p approx. 88° × 72° at 2MP
Available angles of view $^{\!8)}(\text{H}{\times}\text{V})$ at tele end	approx. 76° × 55° at D1 NTSC approx. 76° × 64° at D1 PAL approx. 86° × 55° at 720p approx. 60° × 47° at 2MP

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 $^{\!8)}(H{\times}V)$ at wide end	approx. 29° × 20° at D1 NTSC approx. 29° × 23° at D1 PAL approx. 34° × 20° at 720p approx. 22° × 16° at 2MP
Available angles of view $^{\!8)}(H{}^{\raisebox{2ex}{$\scriptscriptstyle \times$}}{}^{\raisebox{2ex}{$\scriptscriptstyle \times$}})$ at tele end	approx. 6° × 4° at D1 NTSC approx. 6° × 5° at D1 PAL approx. 8° × 4° at 720p approx. 5° × 3° at 2MP

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Dimensions



