DF4910HD-DN/IR

IP Network Box Camera, 3-Megapixel, Full High-Definition, 1080p/30, Day/Night, IR Illumination, Weather-proof, PoE

The **DF4910HD-DN/IR** is a **weather-proof 3-megapixel High-Definition** IP network box camera with **Dallmeier Cam_inPIX®** technology, automatic **Day/Night** switching and integrated **IR (infrared) illumination**.

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**, a **removable IR cut filter (ICR[1])** and an integrated homogeneous **IR illumination** provided by **semi-covert 850 nm high power LEDs** in order to meet even the most demanding of surveillance conditions.

The fast (large maximum aperture) and **motor-driven** megapixel varifocal lens (F1.0 / 2.8 – 11 mm) which allows to adjust the focal length and the focus conveniently via web browser as well as the function **Digital Image Shift** which provides a subsequent digital fine alignment of the image section ensure a convenient and straightforward installation process.

Built into an **IP66-rated weather-proof enclosure**, the camera is designed both for indoor and for outdoor applications.
The camera is 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 supported by ambient light sensing and ICR[1] function
- Homogeneous IR (infrared) illumination by semi-covert 850 nm high power LEDs
- IR illumination range up to approx. 25 meters with a beam angle up to approx. 50 degrees
- Adjustable intensity of infrared illumination and Day/Night switching threshold level
- Minimum illumination 0 lux (with IR LED On)
- Motor-driven megapixel varifocal lens (Day/Night): F1.0 / 2.8 – 11 mm
- Focal length and focus conveniently adjustable via web browser
- Resolution: SD (up to D1), HD (720p, 1080p, 2MP, 3MP)
- 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)
- Privacy Zone Masking (hiding/masking of protected areas)
- Three different exposure metering modes:
  Average metering (light information from entire scene),
  Centre-weighted average metering and Spot metering
- Flip function (horizontal, vertical or both)
- Digital Image Shift[2]
- Motion detection[3] with selectable sensitivity
- Alarm notification via DaVid protocol[3], e-mail and FTP image upload
- Local video memory: SDHC card slot integrated[3]
- Integrated microphone
- Voltage supply via PoE (Class 0, IEEE 802.3af)
- Wall mount bracket for outdoor installation with internal cable routing
- ONVIF compliant
- DIN EN 50130-4 compliant

Variants	
003486	**DF4910HD-DN/IR** IP network box camera, 3-megapixel, Full HD, 1080p/30, Day/Night, IR illumination, weather-proof, wall mount bracket, PoE

1) ICR = IR Cut Filter Removable
2) Provides digital fine alignment of image section
3) Function is in preparation.

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Specifications

Sensor

Type	1/2.5" 5-megapixel CMOS image sensor with Cam_inPIX® technology
Signal processing	Pure Digital Signal Processing
Image capture	Progressive Scan
Minimum illumination	IR LED Off: 0.59 lux (F0.95, 50 IRE) IR LED On: 0 lux
Dynamic Range	Max. 70 dB[4]

Functions

Day/Night switching	Using ambient light sensing and ICR[5] function (switching threshold level adjustable)
B/W (black-and-white) mode	Automatic (in Night mode)
Automatic Electronic Shutter (AES)	1/30 – 1/2500 s
3D Digital Noise Reduction (3D DNR)	On / Off
Automatic Exposure (AE) Presets	Outdoor, Indoor, Fluorescent, 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. 10% of entire image)
Flip function	Horizontal, vertical or both
Digital Image Shift[6]	Yes
Motion detection[7] (VMD)	With selectable sensitivity (5 levels)
Alarm notification	Via DaVid protocol (Dallmeier Video Protocol) to PGuard advance[7], e-mail, FTP image upload
Configuration	Via web browser
Languages	English, German, French, Spanish, Italian

Lens

Type	Megapixel varifocal lens (Day/Night): F1.0 / 2.8 – 11 mm
Iris control	Automatic (DC auto iris)
Zoom control (Tele – Wide)	Motor-driven (controllable via web browser)
Focus control (Far – Near)	Motor-driven (controllable via web browser)
Angle of view[8] (H × V) at wide end	approx. 58° × 46° at D1 approx. 82° × 46° at 720p approx. 82° × 46° at 1080p approx. 68° × 51° at 2MP approx. 73° × 55° at 3MP
Angle of view[8] (H × V) at tele end	approx. 31° × 24° at D1 approx. 26° × 14° at 720p approx. 26° × 14° at 1080p approx. 22° × 16° at 2MP approx. 29° × 21° at 3MP

IR Illumination

Type	Semi-covert 850 nm high power LEDs
IR intensity	Adjustable
Photocell	Adjustable Day/Night switching threshold level
Range	Up to approx. 25 m
Beam angle	Homogeneous illumination up to approx. 50°

Format and Encoding

Video standard	SDTV (PAL/NTSC), HDTV (SMPTE 296M, SMPTE 274M)
Resolution	SD (up to D1), HD (720p, 1080p, 2MP, 3MP)
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 30 fps at 1080p Up to 30 fps at 2MP Up to 15 fps at 3MP
Video bit rate	0.25 – 10 Mbps, CBR (constant bit rate) or VBR (variable bit rate)
Audio bit rate	64 kbps
Video streaming	Simultaneous Dual- or Tri-Streaming: H.264, MJPEG
Transfer format	Progressive (full image)
Live streaming transmission method	Unicast, Multicast

4) According to the sensor manufacturer's specifications
5) ICR = IR Cut Filter Removable
6) Provides digital fine alignment of image section
7) Function is in preparation.
8) The specifications (±5%) are based on a field of view without vignetting. Minor deviations with lenses can be conditional of manufacturing and do not constitute a defect.

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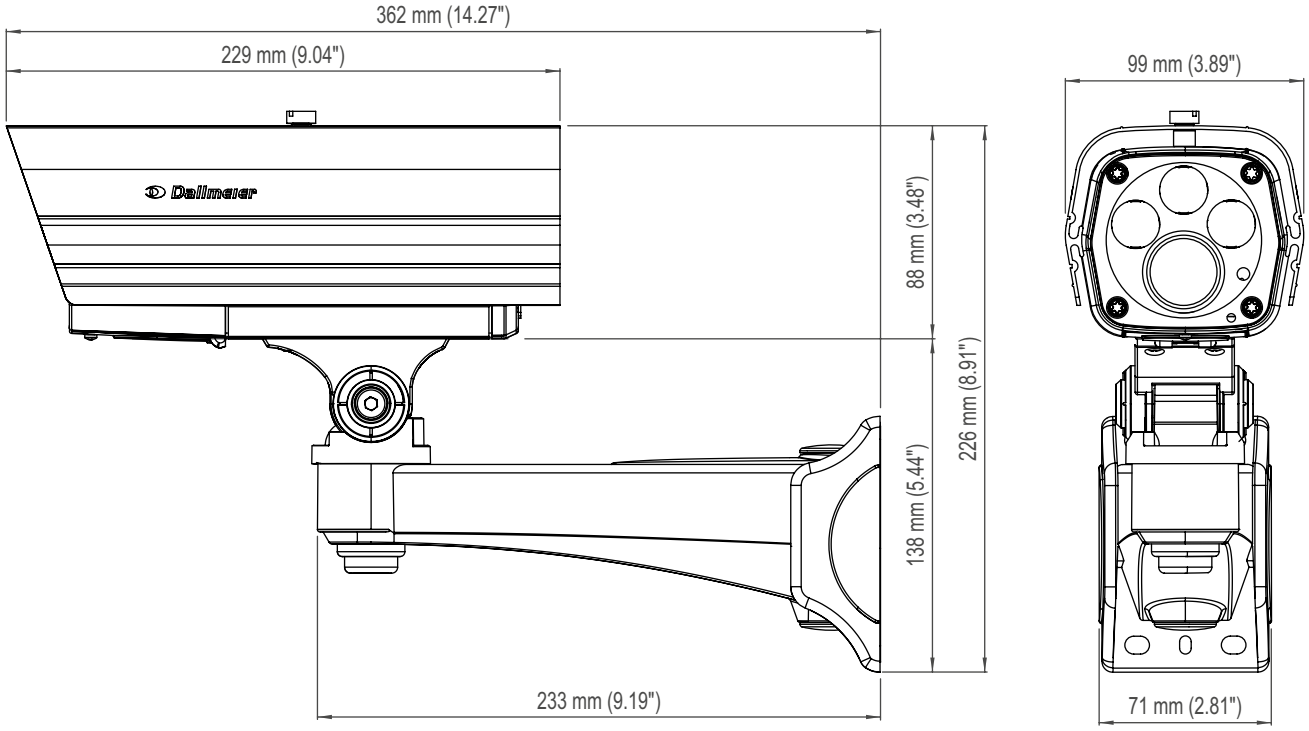
Specifications

Miscellaneous	
Ambient light sensor	Integrated
Microphone	Integrated
Local video memory	SDHC card slot integrated[9)]
Ethernet	1× RJ45, 10BASE-T-/100BASE-TX-PoE
Ethernet protocols	IPv4, TCP, UDP, ARP, ICMP, DHCP, NTP, HTTP, RTSP, IGMP V2, FTP, SMTP, RTP, RTCP
Electrical Data	
Voltage supply	PoE (Class 0)
PoE standard	IEEE 802.3af
Power consumption	Max. 12.95 W
Mechanical Data	
Dimensions	See technical drawings
Weight	Approx. 2 kg (4.41 lb)
Environmental Conditions	
Operating temperature	−30°C to +50°C (−22°F to 122°F)
Relative humidity	0% – 90% RH, non-condensing
IP rating	IP66
Approvals/Certifications	
Type	CE, FCC, ACA, UVV-Kassen, DIN EN 50130-4 compliant

Dimensions



9) Function is in preparation.

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