

## HC-4DM-F28/36-SAL



## 4MP HD-over-coax IR Dome Camera

## System Overview



Experience superior 4MP video and the simplicity of reusing existing coaxial infrastructure with HD-over-coax. EmPower series 4MP HD-over-coax camera features a compact design and offers a high quality image with rich details at a friendly price. It offers various vari-focal/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

## Features

- ▶ Max 30fps@4MP
- ▶ HD and SD output switchable
- ▶ 2.8mm/3.6mm fixed lens
- ▶ Max. IR length 30m, Smart IR
- ▶ IP67, IK10, DC12V



## Functions

## 4 Signals over 1 Coaxial Cable

HD-over-Coax technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HD-over-Coax camera to interact with the HCVR, such as sending control signal or triggering alarm. Moreover, HD-over-Coax technology supports PoC for construction flexibility.

\* Audio input is available for some models of HD-over-Coax cameras.

## Long Distance Transmission

HD-over-Coax technology guarantees real-time transmission at long distance without any loss. It supports up to 800m(1080P)/1200m(720P) transmission via coaxial cable, and up to 300m(1080P)/450m(720P) via UTP cable.\*

\*Actual results verified by real-scene testing in Unisight's test laboratory.

## Simplicity

HD-over-Coax technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HD-over-Coax system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

## Smart IR

The camera is designed with microcrystalline LED IR illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. The unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

## Multi-formats

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFM820 (UTC controller). This feature makes the camera to be compatible with not only HCVRs but also most end users' existing HD/SD DVRs.

## Multi-language OSD

OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

## Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67, making it suitable for indoor or outdoor environments. The camera complies with IK10 impact resistant rating to provide maximum durability against vandals, making it capable of withstanding the equivalent of 55kg (120lbs) of force. Supporting  $\pm 25\%$  input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

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## Technical Specification

<b>Camera</b>	
Image Sensor	1/3" CMOS
Effective Pixels	2688(H)×1520(V), 4.1MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25~1/100000s NTSC: 1/30~1/100000s
Minimum Illumination	0.03Lux/F2.0, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 30m (98feet)
IR On/Off Control	Auto / Manual
IR LEDs	12

<b>Lens</b>	
Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	2.8mm/3.6mm
Max Aperture	F2.0
Angle of View	H: 84.8° (99.7°/52.5°)
Focus Control	N/A
Close Focus Distance	1100mm (800mm/2200mm) 43.3" (31.5"/86.6")

### DORI Distance

Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

	DORI Definition	Distance
Detect	25px/m (8px/ft)	2.8mm: 63m(208ft) 3.6mm: 80m(262ft) 6mm: 117m(385ft)
Observe	63px/m (19px/ft)	2.8mm: 25m(83ft) 3.6mm: 32m(105ft) 6mm: 47m(154ft)
Recognize	125px/m (38px/ft)	2.8mm: 13m(42ft) 3.6mm: 16m(53ft) 6mm: 23m(77ft)
Identify	250ppm (76px/ft)	2.8mm: 6m(21ft) 3.6mm: 8m(26ft) 6mm: 12m(39ft)

<b>Pan / Tilt / Rotation</b>	
Pan/Tilt/Rotation	Pan: 0° ~ 355° Tilt: 0° ~ 65° Rotation: 0° ~ 355°

<b>Video</b>	
Resolution	4MP (2560×1440)
Frame Rate	25/30fps@4MP, 25/30fps@1080P, 25/30fps@720P
Video Output	1-channel BNC high definition video output / CVBS video output (Can switch)

Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / DWDR
WDR	DWDR
Gain Control	AGC
Noise Reduction	2D
White Balance	Auto / Manual
Smart IR	Auto / Manual

<b>Certifications</b>	
Certifications	CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)

<b>Interface</b>	
Audio Interface	N/A

<b>Electrical</b>	
Power Supply	12V DC ±25%
Power Consumption	Max 3.6W (12V DC, IR on)

<b>Environmental</b>	
Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH * Start up should be done at above -40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH
Ingress Protection & Vandal Resistance	IP67, IK10

<b>Construction</b>	
Casing	Aluminium
Dimensions	Φ109.9mm×81.0mm (Φ4.33"×3.19")
Net Weight	0.21kg (0.46lb)
Gross Weight	0.31kg (0.68lb)

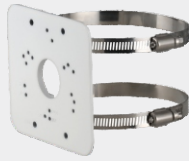
HC-4DM-F28/36-SAL



Accessories (optional)



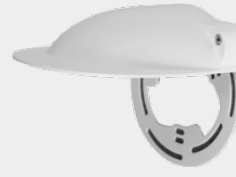
PFA136  
Junction Box



PFA152-E  
Pole Mount



PFB203W  
Wall Mount



PFA200W  
Rain Shade



PFM800-E  
Passive  
HD-over-Coax Balun



PFM800-4MP  
Passive  
HD-over-Coax Balun



PFM801-4MP  
Passive  
HD-over-Coax  
Balun with Power



PFM321  
12V/1A  
Power Adapter



PFM320D-015  
Power Adapter

Dimensions(mm/inch)

