



EmPower Series

HC-4ME-F28-SA



>>>

4MP HD-over-coax MotionEye Camera



System Overview

This MotionEye model is an indoor/outdoor dual detection camera which uses both video and infrared sensor to achieve motion detection and PIR functionality, reducing false alarms and ensuring the accuracy and effectiveness of real-time alarm information. Built-in PIR and coax alarm output makes the camera an ideal choice for applications which require video verification of intrusion alarms, such as courtyards, offices, warehouses, stores, etc.

Features

- Max 30fps@4MP
- HD and SD output switchable
- 2.8mm fixed lens
- ▶ 10m/110°detecting range/angle
- Quaternionic digital sensor
- Max. IR length 20m, Smart IR
- IP67, DC12V











Functions

Wide Detection Range

Designed with Fresnel lens, the PIR of MotionEye is able to cover wide monitoring range with horizontal angle of view up to 110° within a distance from 2m to 10m

Dual Detection

The detection accuracy is well guaranteed with both motion detection and PIR detection, which can eliminate the number of false alarms you receive. With the advantage of dual detection technology, your HDD will now last longer and not be recorded with false alarms. Gone are the days of alarms caused by heavy wind or rain. Instead, only true threats will instantly trigger an alarm and allow you to protect your loved ones.

Long Distance Transmission

HD-over-Coax technology guarantees long-distance and real-time transmission without any loss. It supports up to 700m for 4MP HD video via coaxial cable, and up to 300m via UTP cable*.

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

HD/SD Switchable

The camera supports switchable HD-over-Coax high definition video output and CVBS standard definition video output. The two formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with both HCVRs and existing analog DVRs and also facilitates debugging through analog testers.

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.

Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments. With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. 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.





EmPower Series

HC-4ME-F28-SA



Technical Specification		
Camera		
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(Color), 30IRE, 0Lux IR on	
S/N Ratio	More than 65dB	
IR Distance	Up to 20m (66feet)	
IR On/Off Control	Auto / Manual	
IR LEDs	1	
Lens		
Lens Type	Fixed lens / Fixed iris	
Mount Type	Board-in	
Focal Length	2.8mm	
Max Aperture	F1.8	
Angle of View	H: 107.2°	
Focus Control	N/A	
Close Focus Distance	1100mm 43.31"	
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: 56m(184ft)
Observe	63px/m (19px/ft)	2.8mm: 22m(72ft)
Recognize	125px/m (38px/ft)	2.8mm: 11m(36ft)
Identify	250ppm (76px/ft)	2.8mm: 6m(20ft)
Dan / Tilt / Potation		

Pan / Tilt / Rotation

Pan/Tilt/Rotation

Video	
Resolution	4MP (2560×1440)
Frame Rate	25/30fps@4MP, 25/30fps@1080P, 25/30fps@720P
Video Output	1-channel BNC HDCVI high definition video output / CVBS video output (Can switch)
Day/Night	Auto (ICR) / Manual

Pan: 0° ~ 360° Tilt: 0° ~ 90° Rotation: 0° ~ 360°

DSD Menu Multi-language BLC Mode BLC / HLC / DWDR WDR DWDR Gain Control AGC Noise Reduction 2D White Balance Auto / Manual Smart IR Auto / Manual PIR Detection Passive infrared Detection Range 10m, 110* Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m Certifications Certifications Certifications CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpart8, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel) Dimensions 146.6mm×72.4mm×83mm (5.77°×2.85°×3.27°)		
Gain Control AGC Noise Reduction 2D White Balance Auto / Manual Smart IR Auto / Manual PIR Detection Passive infrared Detection Range 10m, 110* Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~+50°C (+14°F ~+122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~+50°C (+14°F ~+122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	OSD Menu	Multi-language
Gain Control AGC Noise Reduction 2D White Balance Auto / Manual PIR Detection Passive infrared Detection Range 10m, 110° Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection & Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	BLC Mode	BLC / HLC / DWDR
White Balance Auto / Manual Smart IR Auto / Manual PIR Detection Passive infrared Detection Range 10m, 110° Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	WDR	DWDR
White Balance Auto / Manual PIR Detection Passive infrared Detection Range 10m, 110° Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Gain Control	AGC
Smart IR PIR Detection Passive infrared Detection Range 10m, 110° Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Noise Reduction	2D
PIR Detection Passive infrared Detection Range 10m, 110° Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~+50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	White Balance	Auto / Manual
Detection Range 10m, 110° Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above -10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Smart IR	Auto / Manual
Detection Range Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	PIR	
Alarm prompt Red led Installation height Defualt bracket, wall mount, 2.2-2.5m Certifications CE (EN5S032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Detection	Passive infrared
Installation height Defualt bracket, wall mount, 2.2-2.5m 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) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Detection Range	10m, 110°
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) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Alarm prompt	Red led
CE (EN5S032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Installation height	Defualt bracket, wall mount, 2.2-2.5m
FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1) Interface Audio Interface N/A Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Certifications	
Audio Interface Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Certifications	FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)
Eelectrical Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Interface	
Power Supply 12V DC ±30% Power Consumption Max 4.4W (12V DC, IR on) Environmental Operating Conditions -10°C ~+50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~+50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Audio Interface	N/A
Power Consumption Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Eelectrical	
Environmental Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection & Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Power Supply	12V DC ±30%
Operating Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH * Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Power Consumption	Max 4.4W (12V DC, IR on)
* Start up should be done at above-10°C (14°F) Storage Conditions -10°C ~+50°C (+14°F ~ +122°F) / Less than 95% RH Ingress Protection &Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Environmental	
Ingress Protection & Vandal Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Operating Conditions	
Resistance Construction Casing Aluminium (Front cover) + Plastic (Rear Barrel)	Storage Conditions	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 95% RH
Casing Aluminium (Front cover) + Plastic (Rear Barrel)		IP67
	Construction	
Dimensions 146.6mm×72.4mm×83mm (5.77"×2.85"×3.27")	Casing	Aluminium (Front cover) + Plastic (Rear Barrel)
	Dimensions	146.6mm×72.4mm×83mm (5.77"×2.85"×3.27")
Net Weight 0.23kg (0.51lb)	Net Weight	0.23kg (0.51lb)
Gross Weight 0.30kg (0.66lb)	Gross Weight	0.30kg (0.66lb)





EmPower Series

HC-4ME-F28-SA



Accessories (optional)



PFA134 **Junction Box**



PFA152-E Pole Mount



PFM800-E **Passive** HD-over-Coax Balun



PFM800-4MP Passive HD-over-Coax Balun



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

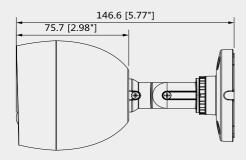


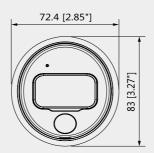
PFM321 12V/1A Power Adapter

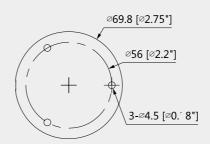


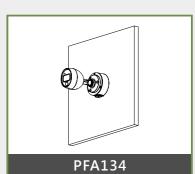
PFM320D-015 **Power Adapter**

Dimensions(mm/inch)

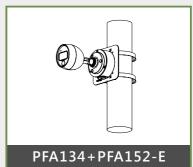








Junction Mount



Pole Mount