

# HDO -ELE2IR28

## 2MP 4-in-1 Bullet Camera

- Max 30fps@1080P
- HD and SD output switchable
- 3.6mm fixed lens
- Max. IR length 30m, Smart IR
- IP67, DC12V

### System Overview

Experience 1080P full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The Lite series 1080P HDCVI camera features a compact design and offers a high quality image at a friendly price. It offers various motorized/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.



### Functions

#### HD-over-COAX

HD-over-Coax is a new analog high definition (HD) video standard transmitting over coaxial cable. The technology provides transmission of HD video as well as audio, and two-way control data over long distances. You can implement an HD system using the same coax cables that your existing analog system is running on. HD-over-Coax installs just like analog cameras and gives you up to 1080p High Definition. No fiber, no configuring, and no special training required.

#### Long Distance Transmission

HDCVI 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.\*

\* Audio input is available for some models of HDCVI cameras.

#### Smart IR

Smart IR is a technology built into some security cameras that adjusts the intensity of the camera's infrared LEDs to compensate for the distance of an object so that the infrared does not overexpose the object.

#### Multi-formats

The camera supports multiple video formats including HDCVI, CVBS and two other common HD analog formats in the market. The four formats can be switched through OSD menu or by a UTC controller. This feature makes the camera compatible with most existing HD/SD DVRs.

#### Multi-language OSD

The OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. It includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for the 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 ranking, making it suitable for indoor or outdoor environments.

With a working temperature range of -40 °F to +140 °F, the camera is designed for extreme temperature environments.

Supporting ±30% 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.

## Technical Specification

### Camera

Image Sensor	1/2.7" CMOS
Effective Pixels	1920(H)×1080(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25~1/100000s NTSC: 1/30~1/100000s
Minimum Illumination	0.02Lux/F1.85, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 30m (98feet)
IR On/Off Control	Auto / Manual
IR LEDs	18

### Lens

Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	3.6mm (2.8mm, 6mm Optional)
Max Aperture	F1.85
Angle of View	H: 87.5° (103°, 54.7°)
Focus Control	N/A
Close Focus Distance	500mm (900mm, 2000mm) 19.69" (35.43", 78.74")

### 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: 37m(122ft) 3.6mm: 53m(175ft) 6mm: 80m(262ft)
Observe	63px/m (19px/ft)	2.8mm: 15m(49ft) 3.6mm: 21m(70ft) 6mm: 32m(105ft)
Recognize	125px/m (38px/ft)	2.8mm: 8m(25ft) 3.6mm: 11m(35ft) 6mm: 16m(52ft)
Identify	250ppm (76px/ft)	2.8mm: 4m(12ft) 3.6mm: 5m(17ft) 6mm: 8m(26ft)

### Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 90° Rotation: 0° ~ 360°
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### Video

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@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

### Certifications

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)
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### Interface

Audio Interface	N/A
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### Electrical

Power Supply	12V DC ±30%
Power Consumption	Max 4.3W (12V DC, IR on)

### Environmental

Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67

### Construction

Casing	Aluminium
Dimensions	164.7mm×70mm×71.6mm (6.48"×2.76"×2.82")
Net Weight	0.37kg (0.82lb)
Gross Weight	0.46kg (1.01lb)

## Accessories

Optional:



PFA134  
Junction box



PM-EL152-E  
Pole mount



HDUTC-EL  
UTC Controller

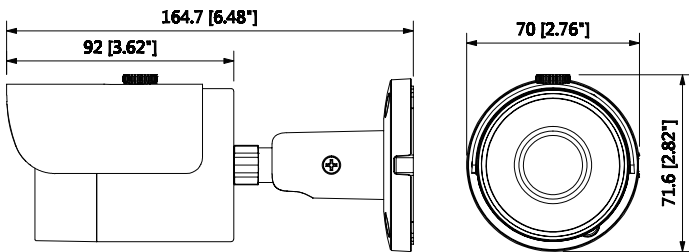


BALUN-HD8MP  
Passive HDCVI Balun



BALUN-HD8MP-P24  
Passive Video Balun

## Dimensions (mm/inch)



Junction Mount	Pole Mount
PFA134	PFA134 + PM-EL152-E