

CVIOD-EL8IR28A

8MP 2.8mm HD-CVI IR Eyeball Dome Security Camera



System Overview

The CVIOD-EL8IR28A is an 8 megapixel HD-CVI camera that will provide 4K (3840x2160) resolution over coaxial cable. This camera give you 8MP video @15fps, 6MP video @20fps, or 4MP video @30fps, it also deals with challenging lighting conditions very well. It has a Starlight™ high-performance sensor built into it and this technology allows the camera to make much better use of very low illumination levels to stay in color video mode far longer than most cameras. The wide angle 2.8mm lens that this camera uses will allow you to detect objects at approximately 276 feet, observe objects at approximately 112 feet, recognize people at approximately 56 feet, and identify people at approximately 26 feet. Because it has an Ingress Protection rating of IP67 and a 4KV lightning rating, there is a wide range of locations where this camera can be installed.

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 4K High Definition. No fiber, no configuring, and no special training required.

Starlight

The starlight standard sensor is just like the retina of your eyes which is sensitive to its ambient light, and the image quality is determined by how much light the sensor could use, together with the camera lens. The starlight camera technology uses larger and highly sensitive sensors, wider aperture and reduces the shutter speed to collect enough light for sharp monochrome/color images, even when human eyes couldn't identify a thing. So the starlight camera can see right through the darkness, even when it is challenging for your eyes.

Broadcast-quality Audio

Audio information can be a big part of evidence in video surveillance applications. This HDCVI camera supports audio signal transmissions over the coaxial cable to provide self-adaptive support for normal coaxial audio and broadcast-quality audio, that not only simplifies operation, but also results in better audio quality and reduced noise interference.

Multiple-formats

This camera supports multiple video formats including HDCVI, CVBS, and other two common HD analog formats on the market. A DIP switch located on the cable allows you to quickly toggle formats, further simplifying installation and debugging. This feature makes the camera compatible with not only XVRs, but also most existing HD/SD DVRs.

- Starlight, 120dB True WDR, 3DNR
- Max. 4K resolution
- HD/SD switchable
- Audio in interface, built-in mic
- 2.8mm fixed lens
- Max. IR length 50m, Smart IR
- IP67, DC12V±30%



Wide Dynamic Range

When part of an image is extremely dark but another part is so bright you can't see any details, that's dynamic range—the difference in lighting. Cameras with wide dynamic range (WDR) have special software that allows them to balance that lighting for one clear image. This makes them ideal for recording areas like store entrances where the contrast between the sunshine outside and the dim lighting inside can be extremely difficult to record.

Advanced 3DNR

Have you ever taken a picture or video outside in the dark (without flash)? You've probably noticed that it can sometimes turn out to be very grainy. In technical terms, this is called noise. Noise is any unwanted interference in the signal. The latest form of Digital Noise Reduction is 3D-DNR. It compares every pixel with the pixels surrounding it in addition to every frame with the next. With 3D-DNR, a thorough processing of the image is applied, including the background. This results in a clearer image than traditional DNR and less space is taken on the hard disk drive.

IP67 Protection

IP67 refers to camera enclosures that have obtained the a rating from the International Electrotechnical Commission's (IEC) international standard 60529 rating board that declares the cameras to be: Offering full protection from dust and solid matter larger than dust and Safe for immersion in water up to 1 meter up to 30 minutes.

CVIOD-EL8IR28A

Technical Specification	
Camera	
Image Sensor	1/2" CMOS
Effective Pixels	3840(H)×2160(V), 8MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/4s~1/100,000s NTSC: 1/3s~1/100,000s
Minimum Illumination	0.005Lux/F1.6, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 50m (164feet)
IR On/Off Control	Auto / Manual
IR LEDs	2

Lens	
Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	2.8mm
Max Aperture	F1.6
Angle of View	H: 87° (110.8°/55°)
Focus Control	Auto / Manual
Close Focus Distance	2500mm (1800mm, 6100mm) 98.43" (70.87", 240.2")

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:84m(276ft)
Observe	63px/m (19px/ft)	2.8mm:34m(112ft)
Recognize	125px/m (38px/ft)	2.8mm:17m(56ft)
Identify	250px/m (76px/ft)	2.8mm:8m(26ft)

Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 70° Rotation: 0° ~ 360°
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Video	
Resolution	8MP (3840×2160)
Frame Rate	15fps@4K, 20fps@6MP, 25/30fps@4MP
Video Output	1-channel BNC high definition video output / CVBS video output (DIP switch)

Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / WDR
WDR	120dB
Gain Control	AGC
Noise Reduction	2D/3D
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	1ch in & Built-in Mic

Electrical	
Power Supply	12V DC ±30%
Power Consumption	Max 8W (12V DC, IR on)

Environmental	
Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH * Start up should be done at above-30°C (-22°F)
Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection & Vandal Resistance	IP67

Construction	
Casing	Aluminium
Dimensions	Φ106mm×99.2mm (Φ4.17"×3.9")
Net Weight	0.5kg (1.10lb)
Gross Weight	0.62kg (1.37lb)

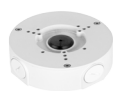
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Accessories

Optional:



WM-EL204W
Wall mount



JB-EL130-E
Junction box



PM-EL152-E
Pole mount

Junction Mount	Pole Mount
JB-EL130-E	WM-EL204W + PM-EL152-E
Wall Mount	
WM-EL204W	

Dimensions (mm/inch)

