

IPVD-ELES4IR28

4MP Starlight Vandal Dome



System Overview

This vandal dome is capable of 4MP (2560 x 1440) video output at 30fps. Built to be used in a variety of environments, thanks to its' IK10 impact rating and IP67 weather rating, you can trust that it will hold up indoors or out. With the latest Starlight™ technology, this camera can reduce color video in areas with minimal to no illumination. This camera's IR (infrared) provides you with IR lighting up to 98 feet away. To add to its capabilities in areas with little or no light, this camera uses WDR (Wide Dynamic Range) to enhance the dark and bright portions of an image to properly balance the illumination.

- 1/3" 4MP CMOS image sensor
- Max. supports 4MP (2688 × 1520) @ 20 fps
- SMART H.264/H.265
- Built-in IR LED, max IR distance: 30 m
- Max. 256 GB SD card
- 12V DC/POE power support
- IP67, IK10 protection grade



Features

Smart (H.265+ & H.264+)

Smart H.265+ technology is a collection of intelligent encoding algorithms based on H.265. To meet the characteristics of video surveillance, Smart H.265+ adopts some key video encoding techniques can be flexibly added/deleted or combined according to different applications and products. Smart H.265+ codec can effectively enhance video encoding efficiency according to the characteristics of different surveillance environments; furthermore, it can greatly reduce transmission bit rate, storage capacity to improve the overall system.

Wide dynamic range (WDR)

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.

Starlight Technology

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.

Intelligent Video Analysis (IVS)

IVS system provides advanced, accurate video analytic for both IP and analog cameras. The IVS engine can track, classify and analyze the behavior of individual or group of objects over long distance to greatly improve parameter security and monitoring efficiency.

Protection (IP67, IK10, wide voltage)

IP67: The camera passed a series of strict tests on dust and water. It has dust-proof functionality, and the enclosure can work normally after soaking in 1 m deep water for 30 minutes.

IK10: The enclosure can withstand the impact from a 5 kg hammer falling from a height of 40 m (Impact energy is 20J) more than 5 times.

Wide voltage: The camera allows $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environments with instable voltage.

Technical Specification

Camera	
Image Sensor	1/3" CMOS
Effective Pixels	2688 (H) × 1520 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.01 Lux @ F1.6
IR Distance	30 m (98.43 ft) (IR)
IR On/Off Control	Auto/Manual
IR LEDs Number	3 (IR LED)
Pan/Tilt/Rotation Range	Horizontal: 0°–355° Vertical: 0°–65° Rotation: 0°–355°

Lens					
Lens Type		Fix focal			
Mount Type		M12			
Focal Length		2.8 mm			
Max. Aperture		F1.6			
Field of View		Horizontal: 102.0° Vertical: 55.0° Diagonal: 121.0°			
Iris Type		Fixed			
Close Focus Distance		0.9 m (2.95 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	56 m (183.73 ft)	22.4 m (73.49 ft)	11.2 m (36.75 ft)	5.6 m (19.37 ft)

Smart Event	
General IVS Analytics	Intrusion; tripwire

Video	
Video Compression	H.265; H.264; H.264B; MJPEG
Smart Codec	H.264: Yes H.265: Yes
Video Frame Rate	50Hz Main stream (2560 × 1440@25 fps); sub stream (704 × 576@25 fps) Main stream (2688 × 1520@20 fps); sub stream (704 × 576@20 fps) 60Hz Main stream (2560 × 1440@30 fps); sub stream (704 × 480@30 fps) Main stream (2688 × 1520@20 fps); sub stream (704 × 480@20 fps)

Stream Capability	Main stream; sub stream
Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps
Day/Night	ICR switch
BLC	Yes
WDR	120 dB
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Disable/Enable (4 areas, rectangle)
Region of Interest(Rol)	Yes (4 areas)
Smart IR	Yes
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution.)
Mirror	Yes
Privacy Masking	4 areas

Network	
Network	RJ-45 (10/100 Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; RTMP; Multicast; HTTPS; SFTP; 802.1x; ICMP; IGMP
Interoperability	ONVIF (Profile S/Profile G); CGI; Milestone; Genetec
Scene self-adaptation	20
User/Host	20
Edge Storage	Dahua Cloud; FTP; Micro SD card (max. 256 GB); NFS
Browser	IE Google Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

Certification	
Certifications	CE-LVD: EN60950-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL: UL60950-1 CAN

Power	
Power Supply	12V DC/POE
Power Consumption	Basic power consumption: 1.9W (12V DC); 2.3W (POE) Max power consumption (H.265 + WDR + Intelligent function + IR): 4.5W (12V DC), 5.2W (POE)

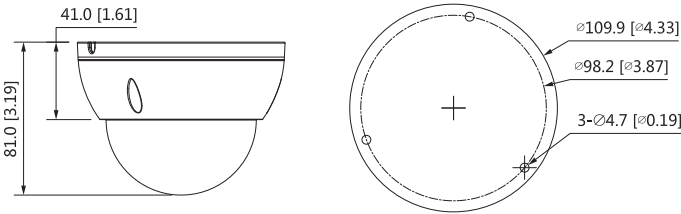
Environment

Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Operating Humidity	≤95%
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Storage Humidity	≤95%
Protection Grade	IP67, IK10

Structure

Casing	Metal
Dimensions	81 mm × Φ109.9 mm (3.19" × Φ4.33")
Net Weight	0.350 kg (0.77 lb)
Gross Weight	0.491 kg (1.08 lb)

Dimensions (mm/inch)



Accessories

Optional:



JB-EL136
Junction Box



WM-EL203W
Wall Mount



PM-EL152-E
Pole Mount

Junction Mount	Wall Mount	Pole Mount
JB-EL136	WM-EL203W	WM-EL203W + PM-EL152-E