

# ZD02-EMR-40

2MP IR PTZ, 40x Optical Zoom, 100 m IR,  
IP 66, IK 10, NDAA



## DNN Edge Analytics

The latest computer vision technology makes DNN accelerated video processing engine efficient at the edge. This engine provides high accuracy, real-time object tracking and human face detection. Moreover, it allows simultaneous detection on multiple objects.

## HDR Engine Gen3

The latest HDR engine delivers excellent, natural high dynamic images. Both details of high light and low light areas are kept, and no blending artifacts are generated.

## Crystal Engine Gen3

Under extremely low light environment, Crystal engine gen3 delivers low noise, high quality image without compromising on details. In addition, it also keeps image sharp on motion object.

## Features

- Sony Progressive Scan CMOS Sensor support 8M Resolution
- 8M, 22x Optical Zoom available
- Multi Exposure HDR
- Electrical Image Stabilizer (EIS) Support
- Multi Codec support (H.265/H.264/MJPEG)
- 3D Motion Compensated Noise Reduction
- IR LED (working distance up to 100m)
- ONVIF Profile S/G/T/M support
- Servo Feedback - Zero Drifting
- Deep Neural Network Accelerated Engine
- Face/LPR Detection and Recognition
- Object Classification and Recognition
- People Detection and Tracking
- Smart Event function
- External Input/Motion Detection
- Network Failure Detection/Audio Detection
- Periodical Event/Manual Trigger
- Weatherproof (IP66)
- NDAA Compliant

## Custom Specification ( Default )

Sony 4K		
Image Sensor	Sony 4K 1/1.8" Progressive CMOS	
Effective Pixels	HxV = 3864x2180 (4K)	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.265	HDR 4K @30fps + 2M @30fps
	H.264	HDR 4K @30fps + 2M @30fps
	MJPEG	2M @30fps
Lens : Default		
Minimum Illumination	Color	0.04 lux
	B/W	0.002 lux
Lens	Type	22x Zoom Lens, P-Iris, Auto-Iris, F1.5
	Focal Length	6.4-138.5 mm
	Horizontal FOV	62.6° (wide), 3.2° (tele)
	Vertical FOV	36.7° (wide), 1.9° (tele)

## Common Specification

Camera		
Day and Night	Removable IR-cut filter	
Shutter Time	1~1/10K sec.	
HDR	Gen3 Engine	
EIS	Yes	
Digital Zoom	10x	
Image Settings	Exposure, White Balance, Brightness, Sharpness, Contrast, Saturation, Hue, IR Threshold, Noise Reduction, Backlight Compensation, Text Overlay, Privacy Mask	
Rotation	90°, 180°, 270° rotation	
Pan/Tilt		
Pan/Tilt Range	Pan : 0~360° endless	Tilt : -20~100°
Manual Speed	Pan : 0.1~90°/s	Tilt : 0.1~55°/s
Preset Speed	Pan : 300°/s	Tilt : 300°/s
Preset	256	
PTZ Mode	8 Sequence, 8 cruise, 4 auto pan	
Video Codec		
Compression	H.265/H.264/MJPEG	
Streaming	Up to 4 individually configurable streams in H.265/H.264/MJPEG Configurable resolution/frame rate/bandwidth LBR/VBR/CBR in H.265/H.264	
Audio Codec		
Compression	G.711/G.726/AAC/LPCM	
Streaming	2 way	
Audio Input	Line in	
Audio Output	Line out	
Network		
Interface	10/100/1000Mbps Ethernet	
Security	User Authentication/HTTPS/IP Filter/IEEE 802.1x	
Supported Protocols	ARP, PPPoE, IPv4/v6, ICMP, IGMP, QoS, TCP, UDP, DHCP, UPnP, SNMP, SMTP, RTP, RTSP, HTTP, HTTPS, FTP, NTP, DDNS	
ONVIF	Profile S/G/T/M conformant	

System Integration	
Event Triggers	External Input, Analytics, Network Failure Detection, Periodical Event, Manual Trigger
Event Actions	External output Activation Video and audio recording to edge storage File Upload : FTP, network share and email Notification : HTTP, FTP, email
Intelligent Video Analytics	
General Analytics	Motion Detection/Audio Detection
DNN Analytics	Face Detection/Tracking/Recognition LPR Detection/Recognition People Detection and Tracking Human/Vehicle Classification Object Classification/Recognition

General		
Casing	Metal and Plastic	
Power	IEEE802.3bt, Type 3, class 6, max TBD watt AC24V, max TBD watt, max TBD VA	
Connectors	RJ45	
	AC24V, Terminal Block	
	Alarm in x4, Alarm out x2, Terminal Block	
	Audio in, Terminal Block Audio out, Terminal Block	
IR Illumination Distance	100m	
Storage	Support for microSD/microSDHC/microSDXC card Support for recording to NAS	
Operating Conditions	-40°C~50°C, with heater 10%~90%, No Condensation	
Storage Conditions	-20°C~70°C	
Approvals	EMC	CE/FCC
	Safety Environment	RoHS IP66
Dimensions	∅207x300 mm with Sunshield	
Weight	3.9 kg	