

- ▶ Deep Neural Network Accelerated Engine
- ▶ HDR Engine Gen3
- ▶ Crystal Engine Gen3
- ▶ IR LED built in
- ▶ LiDAR or wiper support*
- ▶ Support 8M, 31x Optical Zoom
- ▶ Servo Feedback



*optional

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.



Advanced Auto Focus

The Advanced AF technology, combines built-in LiDAR module with the machine learning contrast auto focus, greatly helps the camera to focus faster, achieve better accuracy and escalate focus performance to another level.



Features

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| <ul style="list-style-type: none"> ▶ Sony Progressive Scan CMOS Sensor support 8M Resolution ▶ 8M, 31x Optical Zoom available ▶ LiDAR support* ▶ Wiper support* ▶ Multi Exposure HDR ▶ Electrical Image Stabilizer (EIS) Support ▶ Multi Codec support (H.265/H.264/MJPEG) ▶ 3D Motion Compensated Noise Reduction ▶ ONVIF Profile S/G/T/M support | <ul style="list-style-type: none"> ▶ Deep Neural Network Accelerated Engine <ul style="list-style-type: none"> ▶ Detection and Recognition – Human / Vehicle ▶ Behavior Analytics – Human / Vehicle / Object ▶ Smart Event function <ul style="list-style-type: none"> ▶ External Input/Motion Detection ▶ Network Failure Detection/Audio Detection ▶ Periodical Event/Manual Trigger ▶ Vandal proof (IK10 Rating, excluding glass window) ▶ Weatherproof (IP66) ▶ Servo Feedback - Zero Drifting ▶ IR LED (working distance up to 100m) |
|---|--|

* optional

Custom Specification (Default)

Image Sensor		
Image Sensor	Sony 8M 1/1.8" Progressive CMOS	
Effective Pixels	HxV = 3864x2180 (8M)	
Video Resolution	3840 x 2160	
Pixel Size	2.0 μ m	
Frame Rate (Maximum)	H.265	HDR 8M @30fps + d1 @30fps
	H.264	HDR 8M @30fps + d1 @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	0.009 lux
	B/W	0.006 lux
Lens	Type	31x Zoom Lens, P-Iris, Auto-Iris, F1.35
	Focal Length	6.9-214.6 mm
	Horizontal FOV	61.8° (wide), 2.2° (tele)
	Vertical FOV	35.9° (wide), 1.3° (tele)
Camera Features		
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	
Image Rotation	180° rotation	

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

LiDAR		
Laser Wavelength	905 nm	
Minimum Range Distance	1 m	
Range Capability	100 m	
Measuring Accuracy for	$\geq 1 \text{ m} \ \& \ < 10 \text{ m}$	$\pm 0.1 \text{ m}$
	$\geq 10 \text{ m} \ \& \ \leq 50 \text{ m}$	$\pm 0.2 \text{ m}$
	$\geq 50 \text{ m} \ \& \ \leq 100 \text{ m}$	$\pm 0.5 \text{ m}$
Range Acquisition Time	8.33 ms (120Hz)	

*Optional

Common Specification

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, RTSPS, HTTP, HTTPS, FTP, NTP, DDNS, LLDP, RTMP, SRTP	
ONVIF	Profile S/G/T/M conformant	

General		
Casing	Metal and Plastic	
Power	IEEE802.3bt, Type 3, class 6, max 51.00 watt AC24V, max 53.10 watt, max 74.80 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/IK10 ¹
Dimensions	Ø241x349 mm with Sunshield	
Weight	5.5 kg	

¹ IK10 rating excluding glass window

Custom Specification

Preliminary

Default

Image Sensor		
Image Sensor	Sony 8M 1/1.8" Progressive CMOS	
Effective Pixels	HxV = 3864x2180 (8M)	
Video Resolution	3840x2160	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.265	HDR 8M @30fps + d1 @30fps
	H.264	HDR 8M @30fps + d1 @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	0.169 lux
	B/W	0.113 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)

Image Sensor		
Image Sensor	Sony 8M 1/1.8" Progressive CMOS	
Effective Pixels	HxV = 3864x2180 (8M)	
Video Resolution	3840x2160	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.265	HDR 8M @30fps + d1 @30fps
	H.264	HDR 8M @30fps + d1 @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	0.009 lux
	B/W	0.006 lux
Lens	Type	31x Zoom Lens, P-Iris, Auto-Iris, F1.35
	Focal Length	6.9-214.6 mm
	Horizontal FOV	61.8° (wide), 2.2° (tele)
	Vertical FOV	35.9° (wide), 1.3° (tele)

Image Sensor		
Image Sensor	Sony 8M 1/1.8" Progressive CMOS	
Effective Pixels	HxV = 3856x2180 (8M)	
Video Resolution	3840x2160	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.265	HDR 8M @30fps + d1 @30fps
	H.264	HDR 8M @30fps + d1 @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	0.009 lux
	B/W	0.006 lux
Lens	Type	31x Zoom Lens, P-Iris, Auto-Iris, F1.35
	Focal Length	6.9-214.6 mm
	Horizontal FOV	62.0° (wide), 2.3° (tele)
	Vertical FOV	35.8° (wide), 1.2° (tele)