

- ▶ Deep Neural Network Accelerated Engine
- ▶ Outstanding High Dynamic Range
- ▶ Excellent Low Light Performance
- ▶ Zoom Lens/ Motorized Lens Available
- ▶ Remote Zoom/ Focus/ IRIS Control on AF Lens
- ▶ Dual IRIS Support (Auto-IRIS & P-IRIS)



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

- Progressive scan CMOS image sensor support up to 5M Resolution
- Multi Exposure HDR
- Multi Codec support (H.265/ H.264/ MJPEG)
- Quad Streams support
- True Day/Night function (ICR)
- IR LED (working distance up to 50m)
- 3D Motion Compensated Noise Reduction (MCTF)
- Micro SD/ SDHC/ SDXC Card support
- ONVIF Profile S/ G/ T/ M support
- 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/ Tampering Alarm
 - Periodical Event/ Manual Trigger/ Audio Detection
- Weatherproof (IP66)

Custom Specification (Default)

OmniVision 5M			
Image Sensor	OmniVision 5M 1/2.7" Progressive CMOS		
Effective Pixels	HxV = 2720x1976 (5M)		
Pixel Size	2.0 μm		
Frame Rate (Maximum)	H.265	HDR 5M	@30fps + 720p @30fps
	H.264	HDR 5M	@30fps + 720p @30fps
	MJPEG	1080p	@30fps
Lens			
Minimum Illumination	Color	0.08 lux	
	B/W	0.008 lux	
Lens	Type	Motorized Lens, P-Iris, F1.6	
	Focal Length	2.7-12mm	
	Horizontal	102.1° (wide), 31.5° (tele)	
	Vertical	70.3° (wide), 22.7° (tele)	

Common Specification

Camera	
Day and Night	Automatically removable IR-cut filter
Shutter Time	1~1/10K sec.
HDR	Yes
Zoom	Optical zoom, digital zoom 10x
Image Settings	Color, Brightness, Sharpness, Contrast White Balance, Exposure Control 2DNR, 3DNR, NR by Motion Masking, Text Overlay
Image Rotation	90°, 180°, 270° rotation
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	1Gbps 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
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/ Tampering/ Audio detection
DNN Analytics	Face Detection/ Tracking/ Recognition LPR Detection/ Recognition People Counting Human/ Vehicle Classification Object Classification/ Recognition

General	
Casing	Metal and Plastic
Power	PoE IEEE802.3af, class 0, max 12.95 watt DC12V, 1.37A, max 16.37 watt AC24V, max 14.30 watt, max 26.40 VA
Connectors	RJ45
	Alarm in x2, Alarm out x1, Terminal Block
	DC12V Terminal Block
	AC24V Terminal Block
	Audio in 3.5mm Jack Audio out 3.5mm Jack
IR Illumination	Illumination distance: 50m
Storage	Support for microSD/ microSDHC/ microSDXC card Support for recording to NAS
Operating Conditions	-30°C~55°C without heater -55°C~55°C with heater 10%~90%, No Condensation
Storage Conditions	-20°C~70°C
Approvals	EMC CE / FCC Environment IP66
Dimensions	Ø92x224.6 mm
Weight	780 g

Custom Specification

Default

Sony 2M			
Image Sensor	Sony 2M 1/2.8" Progressive CMOS		
Effective Pixels	HxV= 1945x1097 (2M)		
Pixel Size	2.9 μm		
Frame Rate (Maximum)	H.265	HDR 1080p	@30fps + 720p @30fps
	H.264	HDR 1080p	@30fps + 720p @30fps
	MJPEG	1080p	@30fps
Lens			
Minimum Illumination	Color	0.02 lux	
	B/W	0.001 lux	
Lens	Type	Motorized Lens, P-Iris, F1.6	
	Focal Length	2.7-12mm	
	Horizontal FOV	106.3° (wide), 33.0° (tele)	
	Vertical FOV	58.3° (wide), 18.6° (tele)	

OmniVision 5M			
Image Sensor	OmniVision 5M 1/2.7" Progressive CMOS		
Effective Pixels	HxV = 2720x1976 (5M)		
Pixel Size	2.0 μm		
Frame Rate (Maximum)	H.265	HDR 5M	@30fps + 720p @30fps
	H.264	HDR 5M	@30fps + 720p @30fps
	MJPEG	1080p	@30fps
Lens			
Minimum Illumination	Color	0.08 lux	
	B/W	0.008 lux	
Lens	Type	Motorized Lens, P-Iris, F1.6	
	Focal Length	2.7-12mm	
	Horizontal FOV	102.1° (wide), 31.5° (tele)	
	Vertical FOV	70.3° (wide), 22.7° (tele)	

OmniVision 4M			
Image Sensor	OmniVision 4M 1/3" Progressive CMOS		
Effective Pixels	HxV = 2720x1536 (4M)		
Pixel Size	2.0 μm		
Frame Rate (Maximum)	H.265	HDR 4M	@30fps + 720p @30fps
	H.264	HDR 4M	@30fps + 720p @30fps
	MJPEG	1080p	@30fps
Lens			
Minimum Illumination	Color	0.1 lux	
	B/W	0.01 lux	
Lens	Type	Motorized Lens, P-Iris, F1.6	
	Focal Length	2.7-12mm	
	Horizontal FOV	99.4° (wide), 31.3° (tele)	
	Vertical FOV	53.1° (wide), 17.7° (tele)	

Sony 5M			
Image Sensor	Sony 5M 1/2.8" Progressive CMOS		
Effective Pixels	HxV= 2616x1964 (5M)		
Pixel Size	2.0 μm		
Frame Rate (Maximum)	H.265	HDR 5M	@30fps + 720p @30fps
	H.264	HDR 5M	@30fps + 720p @30fps
	MJPEG	1080p	@30fps
Lens			
Minimum Illumination	Color	0.1 lux	
	B/W	0.01 lux	
Lens	Type	Motorized Lens, P-Iris, F1.6	
	Focal Length	2.7-12mm	
	Horizontal FOV	TBD	
	Vertical FOV	TBD	

OmniVision 4M			
Image Sensor	OmniVision 4M 1/1.8" Progressive CMOS		
Effective Pixels	HxV = 2688x1520 (4M)		
Pixel Size	2.9 μm		
Frame Rate (Maximum)	H.265	HDR 4M	@30fps + 720p @30fps
	H.264	HDR 4M	@30fps + 720p @30fps
	MJPEG	1080p	@30fps
Lens			
Minimum Illumination	Color	0.1 lux	
	B/W	0.01 lux	
Lens	Type	Motorized Lens, P-Iris, F1.5	
	Focal Length	3.6-11mm	
	Horizontal FOV	TBD	
	Vertical FOV	TBD	