

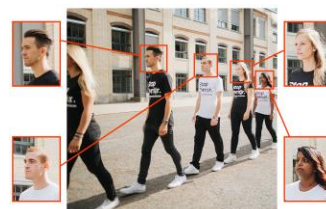
- ▶ AI Engine Gen 2
- ▶ HDR Engine Gen3
- ▶ Crystal Engine Gen3
- ▶ Up to 5M Resolution and 30x Optical Zoom available
- ▶ Servo Feedback
- ▶ Vandal Proof and Weatherproof*



* 821 Only

AI Execution Performance Increased by Up to 24 Times

Compared to baseline models, the computing power of D series has been increased by 24 times. This allows for faster processing, high accuracy, and improved recognition of smaller objects at the same resolution.



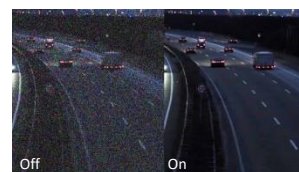
HDR Engine Gen3

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 up to 5M Resolution
- ▶ 5M, 30x Optical Zoom available
- ▶ Multi Exposure HDR
- ▶ Electrical Image Stabilizer (EIS) Support
- ▶ Multi Codec support (H.265/H.264/MJPEG)
- ▶ 3D Motion Compensated Noise Reduction
- ▶ Servo Feedback - Zero Drifting
- ▶ ONVIF Profile S/G/T/M support
- ▶ Deep Neural Network Accelerated Engine
 - ▶ Detection and Recognition – Human / Vehicle
 - ▶ Behavior Analytics – Human / Vehicle / Object
- ▶ Smart Event function
 - ▶ External Input/ Motion Detection
 - ▶ Network Failure Detection/ Tampering Alarm
 - ▶ Periodical Event/ Manual Trigger/ Audio Detection
- ▶ Vandal Proof (IK10 Rating)*
- ▶ Weatherproof (IP66)*

* 821 Only

Custom Specification (Default)

Preliminary

Sony 5M		
Image Sensor	Sony 5M 1/2.8" Progressive CMOS	
Effective Pixels	HxV = 2608 x 1964	
Video Resolution	2592 x 1944	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.265	HDR 5M @30fps + 2M @30fps
	H.264	HDR 5M @30fps + 2M @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	TBD lux
	B/W	TBD lux
Lens	Type	30x Zoom Lens, P-Iris, Auto-Iris, F1.8
	Focal Length	4.5-135 mm
	Horizontal FOV	59.4° (wide), 2.4° (tele)
	Vertical FOV	46.1° (wide), 1.8° (tele)

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

Common Specification

Camera		
Day and Night	Removable IR-cut filter	
Shutter Time	1~1/10K sec.	
HDR	Gen3 Engine	
EIS	Yes	
Digital Zoom	12x	
Image Settings	Exposure, White Balance, Brightness, Sharpness, Contrast, Saturation, Hue, Day/Night Threshold, Noise Reduction, Backlight Compensation, Text Overlay, Privacy Mask	
Rotation	180° rotation	
Pan/Tilt		
Pan/Tilt Range	Pan : 0~360° endless	Tilt : -10~100°
Manual Speed	Pan : 0.1~90°/s	Tilt : 0.1~55°/s
Preset Speed	Pan : 400°/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	721: PoE+ IEEE802.3at, class 4, max TBD watt AC24V, max TBD watt, max TBD VA	
	821: PoE+ IEEE802.3at, class 4, 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	
Storage	CVBS Connector	
	Support for microSD/microSDHC/microSDXC card Support for recording to NAS	
Operating Conditions	721	-25°C~50°C, without heater
	821	-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*
Dimensions	721	Ø 212x264 mm
	821	Ø 210x279 mm with Sunshield
Weight	721	2.7 kg
	821	3.1 kg

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	H.264	HDR 5M @30fps + 2M @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	TBD lux
	B/W	TBD lux
Lens	Type	30x Zoom Lens, P-Iris, Auto-Iris, F1.8
	Focal Length	4.5-135 mm
	Horizontal FOV	59.4° (wide), 2.4° (tele)
	Vertical FOV	46.1° (wide), 1.8° (tele)

Sony 5M		
Image Sensor	Sony 5M 1/2.8" Progressive CMOS	
Effective Pixels	HxV = 2608 x 1964	
Video Resolution	2592 x 1944	
Pixel Size	2.0 μm	
Frame Rate (Maximum)	H.265	HDR 5M @30fps + 2M @30fps
	H.264	HDR 5M @30fps + 2M @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	0.197 lux
	B/W	0 lux
Lens	Type	40x Zoom Lens, P-Iris, Auto-Iris, F1.6
	Focal Length	4.25-170 mm
	Horizontal FOV	62.6° (wide), 1.9° (tele)
	Vertical FOV	48.8° (wide), 1.4° (tele)

Sony 2M		
Image Sensor	Sony 2M 1/2.8" Progressive CMOS	
Effective Pixels	HxV = 1936 x 1096	
Video Resolution	1920 x 1080	
Pixel Size	2.9 μm	
Frame Rate (Maximum)	H.265	HDR 2M @30fps + 2M @30fps
	H.264	HDR 2M @30fps + 2M @30fps
	MJPEG	HDR 2M @30fps
Lens		
Minimum Illumination	Color	0.1 lux
	B/W	0.002 lux
Lens	Type	40x Zoom Lens, P-Iris, Auto-Iris, F1.6
	Focal Length	4.25-170 mm
	Horizontal FOV	66.5° (wide), 2.0° (tele)
	Vertical FOV	39.6° (wide), 1.2° (tele)