

- IP68
- 2MP
- 40X
- AI



- 2MP Resolution, 40X Optical Zoom
- Explosion-Proof, anti-corrosion, waterproof
- 304 Stainless Steel (can be customized to 316L stainless steel), apply to strong corrosive environment.
- AI Application: Face Detection, People Detection, Video Motion Detection, Privacy Guard, Vehicle Detection, Non mask Detection, Occupancy Detection, Scene Change Detection
- AI Sound Classification: Gunshot, Yell, Vehicle horn, Glass break (Microphone Required)
- Up to 2 Edge AI analytic apps
- AI auto tracking

## EX Marking




## Certification



## Markets



	Ex-Level	ATEX II 2G Ex db IIC T6 Gb II 2D Ex tb IIIC IP68 T80°C Db
	Ingress Protection level	IP68
Housing Specification	Temperature range	-40°C~60°C
	Relative humidity	≤ 95% (+25°C)
	Atmospheric pressure	80kpa~106 kpa
	Supply voltage	PoE++, DC54V: 850 mA/Approx. 45.9 W
	Suitable Environment	Apply to explosive gas and combustible dust environment
	Material	304L Stainless Steel
	Dimensions	97.5mm * 51mm * 60mm (The actual movement has a small size error within mm)
	Installation method	bracket or base installation
Camera	Image Sensor	Approx. 1/2.8 type CMOS image sensor
	Scanning Area	5.57 mm (H) × 3.13 mm (V) {7/32 inches (H) × 1/8 inches (V)}
	Minimum Illumination	Color : 0.011 lx (30IRE, F1.6, 1/30s) Color : 0.015 lx (50IRE, F1.6, 1/30s) BW : 0.006lx (50IRE, F1.6, 1/30s) BW : 0 lx (50IRE, F1.6, 1/30s with IR LED)
	White Balance	ATW1 / ATW2 / AWC
	Shutter Speed	[60fps mode] 1/60 Fix to 1/10000 Fix [50fps mode] 1/50 Fix to 1/10000 Fix
	Maximum shutter	60 fps/30 fps/15 fps mode: Max.1/4000s to Max.16/30s 50 fps/25 fps/12.5 fps mode: Max.1/4000s to Max.16/25s
	Intelligent Auto	On / Off
	Super Dynamic	On / Off, The level can be set in the range of 0 to 31.
	Dynamic Range	Max.144 dB (Super Dynamic : On, Level 31)
	Adaptive Black Stretch	The level can be set in the range of 0 to 255.

Camera	Back Light Compensation/ High Light Compensation	BLC (Back light compensation) / HLC (High light compensation) / Off The level can be set in the range of 0 to 31 (only when Super dynamic / Intelligent Auto : Off)
	Fog Compensation	On / Off , The level can be set in the range of 0 to 8 (only when Intelligent auto / auto contrast adjust : Off )
	Maximum Gain (AGC)	The level can be set in the range of 0 to 11.
	Color/BW (ICR)	Off / On (IR Light Off ) / On (IR Light On) / Auto1 (IR Light Off ) / Auto2 (IR Light On) / Auto3 (SCC)
	IR LED Light	High/ Middle/ Low/ Off Maximum irradiation distance: 350 m {Approx. 1150 ft} (30IRE)* 250 m {Approx. 820 ft} (50IRE) *Converted value
	Digital Noise Reduction	The level can be set in the range of 0 to 255.
	Video Motion Detection (VMD)	On / Off, 4 areas available
	Scene Change Detection (SCD)	On / Off, 1 areas available
	Audio Detection	On / Off
	AI Sound Classification	Gunshot, Yell, Vehicle horn, Glass break
	AI Analytics	AI Video Motion Detection, AI Face Detection, AI People Detection, AI Vehicle Detection, AI Non mask Detection, AI Occupancy Detection, AI Scene Change Detection
	Privacy Zone	On / Off, Up to 32 zones available
	VIQS	On / Off, Up to 8 zones available
	Image Stabilizer	On / Off (Built-in gyro sensor)
	Image Rotation	On / Off
Camera Title (OSD)	On / Off, Up to 40 characters (alphanumeric characters, marks)	
Lens	Optical zoom	40x (Motorized zoom / Motorized focus)
	Extra zoom	Max. 60x (40x - 60x when resolution is 1280x720)
	Focal length	4.25 - 170 mm {5/32 inches - 6-11/16 inches}

Lens	Angular Field of View	[16 : 9 mode] Horizontal : 2.0° (TELE) – 65° (WIDE), Vertical : 1.2° (TELE) – 39° (WIDE)(TBD) [ 4 : 3 mode] Horizontal : 1.5° (TELE) – 51° (WIDE), Vertical : 1.2° (TELE) – 39° (WIDE)(TBD)
	Maximum Aperture Ratio	1 : 1.6 (WIDE) – 1 : 4.95 (TELE)
	Focus range	3.0 m {118-1/8 inches} –∞
	Aperture range	F1.6 – close
DORI	Detect (25ppm / 8ppf)	Wide: 60.3 m / 197.8 ft, Tele: 2199.9 m / 7217.6 ft
	Observe (62.5ppm / 19ppf)	Wide: 24.1 m / 79.1 ft , Tele: 880.0 m / 2887.1 ft
	Recognize (125ppm / 38ppf)	Wide: 12.1 m / 39.6 ft, Tele: 440.0 m / 1443.5 ft
	Identify (250ppm / 76ppf)	Wide: 6.0 m / 19.8 ft, Tele: 220.0 m / 721.8 ft
System on Chip (SoC)	System on Chip	Ambarella CV25m
Adjusting Angle	Adjusting Angle	Horizontal : 360° Endless Panning, TILT : -20° to +90°, Yaw : 0°
Pan / tilt	Panning Range	360° Endless panning
	Panning Speed	Manual: Approx. 0.065°/s – 150°/s, Preset: Up to approx. 700°/s
	Tilting Range	Operational range -20° – +90°
	Tilting Speed	Manual: Approx. 0.065°/s –150°/s, Preset: Up to approx. 500°/s
	Preset Positions	256 positions
	Auto Mode	Auto track/ Auto pan/ Preset sequence/ Patrol
	Self Return	10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min
	Active ClearSight	Yes
Browser GUI	GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
	Browser	Microsoft Edge, Firefox, Google Chrome
Network	Network IF	10Base-T / 100Base-TX, RJ45 connector
	Resolution H.265/ H.264/ JPEG (MJPEG)	[16:9 mode (60fps mode)], [16:9 mode (30fps mode)], [16:9 mode (50fps mode)], [16:9 mode (25fps mode)] 1920x1080, 1280x720, 640x360, 320x180 [4:3 mode (30 fps mode)], [4:3 mode (25 fps mode)] 1280x960, VGA, QVGA [4:3 mode (15 fps mode)], [4:3 mode (12.5 fps mode)] 2048x1536* , 1280x960, VGA, QVGA *Used bu super resolution techniques

Network	H.265/H.264 Transmission Mode / Type	[Transmission Mode] Constant bit rate / VBR / Frame rate / Best effort [Transmission Type] Unicast port (AUTO) / Unicast port (MANUAL) / Multicast
	JPEG	[Image Quality] 10 steps
	Smart Coding	GOP (Group of pictures) control: Off / Low (Variable GOP 1s-8s)/ Mid (Variable GOP 4s-16s)/ Advanced(Fixed GOP 60s w/1s key-frame)/ Frame rate control (Variable GOP 4s-16s with frame rate control) *Advanced and Frame rate control are only available with H.265. Smart VIQS: On(High)/On(Low)/Off , Smart P-picture control: On/Off
	Audio compression method	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC*5 : 64 kbps / 96 kbps / 128 kbps
	Audio Transmission Mode	Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)
	Supported Protocol	IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, MQTT, NTCIP
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)
	Secure	FIPS 140-2 level 3 (NXP® EdgeLock® SE050F), Device Certificate GlobalSign® pre-installed, HTTPS, User authentication, Digest authentication, Host authentication, IEEE802.1X, System log, Image transmission log, Brute-force protection, Alteration detection

Network	SDXC/SDHC/SD Memory Card (Option)	H.265 / H.264 recording : Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure JPEG recording : Manual REC / Alarm REC (Pre/Post) / Backup upon network failure Compatible SDXC/SDHC/SD Memory Card : microSDXC memory card : 64 GB, 128 GB, 256 GB, 512 GB microSDHC memory card : 4 GB, 8 GB, 16 GB, 32 GB microSD memory card : 2 GB
	Mobile Terminal Compatibility	iPad, iPhone (iOS 8.0 or later), Android™ terminals
	ONVIF® Profile	G / M / S / T
Alarm	Alarm Source	3 terminals input, VMD alarm, Command alarm, Audio detection alarm
	Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output
Input/Output	Audio Input	ø3.5 mm stereo mini jack Recommended applicable microphone: Plug-in power type (Sensitivity of microphone:-51dB to -38dB (0 dB=1 V/Pa, 1 kHz)) Input impedance: Approx. 2 kΩ (unbalanced) Supply voltage: 4.0V±0.5V For line input : Input level : Approx. -10 dBV
	Audio Output	ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600Ω (unbalanced) Output level : -20 dBV ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600Ω (unbalanced) Output level : -20 dBV
	External I/O Terminals	ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)
Other Specification	Safety	UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1
	EMC	FCC (Part15 ClassA), ICES-003 Issue 7 ClassA, EN55032 ClassA, EN55035
	Standard	NEMA-TS2