

DS-2DY5425MXG0-CWEX(316L)10m
316L 4MP 25x Explosion-proof Network Positioning System



- Ex-mark: ATEX: Ex II 2GD Ex db IICT6 Gb /Ex tb IIICT80°C Db; IECEx: Ex db IICT6 Gb /Ex tb IIICT80°C Db
- 1/2.8" progressive scan CMOS
- Up to 2560 × 1440 @30 fps resolution
- Min. illumination: Color: 0.005 Lux @(F1.6, AGC ON) , B/W: 0.001 Lux @(F1.6, AGC ON) , 0 Lux with IR
- 25× optical zoom, 16 × digital zoom
- 120 dB WDR, HLC, BLC, 3D DNR, Defog, EIS, Regional Exposure, Regional Focus
- Expansive night view with up to 100 m IR distance and 30 m white light
- Support H.265+/H.265 video compression

▪ Specification

Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Max. Resolution	2560 × 1440
Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0.001 Lux @ (F1.6, AGC ON), 0 Lux with IR
Shutter Speed	1/1 s to 1/30000 s
Day & Night	IR cut filter
Zoom	25 × optical, 16 × digital
Slow Shutter	Yes
EIS	Yes. Built-in gyroscope to improve EIS performance.
Lens	
Focal Length	4.8 to 120 mm
FOV	Horizontal field of view: 55° to 2.4°, vertical field of view: 33° to 1.4°, diagonal field of view: 61.5° to 2.8°
Focus	Auto, semi-auto, manual
Aperture	F1.6
Zoom Speed	Approx. 3.6 s
Illuminator	
Supplement Light Type	IR, White Light
Supplement Light Range	IR distance: up to 100 m, White light distance: up to 30 m
Smart Supplement Light	Yes
IR Wavelength	850 nm
PTZ	
Movement Range (Pan)	360° endless
Movement Range (Tilt)	-90° to 90°
Pan Speed	Pan speed: configurable from 0.1° to 25°/s, preset speed: 25°/s
Tilt Speed	Tilt speed: configurable from 0.1° to 15°/s, preset speed 15°/s
Proportional Pan	Yes
Presets	300
Preset Freezing	Yes
Patrol Scan	8 patrols, up to 32 presets for each patrol
Pattern Scan	4 pattern scans, record time over 10 minutes for each scan
Park Action	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan
3D Positioning	Yes
PTZ Status Display	Yes
Scheduled Task	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output
Power-off Memory	Yes
Video	
Main Stream	50Hz : 25fps (2560 × 1440 , 1920 × 1080 , 1280 × 960 , 1280 × 720)
	60Hz : 30fps (2560 × 1440 , 1920 × 1080 , 1280 × 960 , 1280 × 720)
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288)
	60 Hz: 30 fps (704 × 480, 640 × 480, 352 × 240)

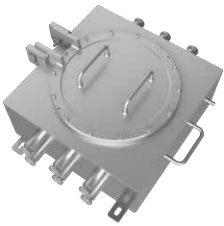

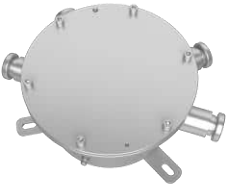

Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264/MJPEG
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline profile, Main profile, High profile
H.265 Type	Main profile
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	8 fixed regions for each stream
Audio	
Audio Compression	G.711, G.722.1, G.726, MP2L2, PCM
Audio Bit Rate	64 Kbps (G.711), 16 Kbps (G.722.1), 16 Kbps (G.726), 32 to 192 Kbps (MP2L2)
Audio Sampling Rate	8 kHz, 16 kHz, 32 kHz, 48 kHz
Environment Noise Filtering	Yes
Network	
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour
Simultaneous Live View	Up to 20 channels
API	ONVIF (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP
Smooth Streaming	Yes
User/Host	Up to 32 users. 3 user levels: administrator, operator, and user
Security	Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.2/1.3, host authentication (MAC address), TPM 2.0 (FIPS 140-2 level 2)
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
Client	iVMS-4200, HikCentral Pro, Hik-Connect
Web Browser	IE11, Chrome 57+, Firefox 52+, Safari 11+
AI Open Platform	
Model Specification	Supports 4 model packages, and each model package supports detecting 16 target types and classifying 4 targets. The targets can be classified as 64 types. The device runs only 1 model at the same time.
Image	
Image Parameters Switch	Yes
Image Settings	Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by client software or web browser
Day/Night Switch	auto
Wide Dynamic Range (WDR)	120 dB
SNR	≥ 52 dB
Defog	Digital defog
Image Enhancement	HLC, BLC, 3D DNR
Privacy Mask	24 programmable polygon privacy masks, mask color or mosaic configurable
Interface	
Ethernet Interface	1 RJ45 10/100M self-adaptive Ethernet port

On-board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB
Event	
Basic Event	Motion detection, video tampering alarm, exception, alarm input and output
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, smart tracking
Deep Learning Function	
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting. Support alarm triggering by specified target types (human and vehicle)
Road Traffic and Vehicle Detection	Blocklist and allowlist: up to 10,000 records Captures vehicle that has no license plate Support license plate recognition of motorcycles (only in checkpoint scenario) Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.)
General	
Power	100 VAC to 240 VAC, Max. 21.2W (3W for IR); PoE (802.3at), 42.5 to 57 VDC, 0.6 A
Dimension	345.5 mm × 190.3 mm × 281.9 mm (15.57" × 7.49" × 11.09")
Weight	Approx. 14.8 kg (32.64 lb.)
Material	SUS316L stainless steel with anti-corrosion surface spray treatment
Operating Condition	-40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)
Cable Length	10 m (27.34 ft.)
General Function	Anti-flicker, heartbeat, mirror, flash log, password reset via e-mail, pixel counter, password protection, one-key reset, three streams
Wiper	Yes
Approval	
EMC	CE-EMC (EN 55032:2015, EN 61000-3-2:2019, EN 61000-3-3:2013, EN 50130-4:2011 +A1:2014), KC (KN 32:2015, KN 35:2015), RCM (AS/NZS CISPR 32:2015), IC (ICES-003: Issue 7)
Safety	CB (IEC 62368-1:2014 + A11), CE-LVD (EN 62368-1:2014/A11:2017), BIS (IS 13252 (Part 1):2010/IEC 60950-1:2005), LOA (IEC/EN 60950-1)
Environment	CE-RoHS (2011/65/EU), WEEE (2012/19/EU), Reach (Regulation (EC) No 1907/2006)
Protection	IP68 (IEC 60529-2013), IK10 (IEC 62262:2002)
Explosion-Proof Protection	ATEX: II 2 G D Ex db IIC T6 Gb/Ex tb IIIC T80°C Db IP68, IECEX: Ex db IIC T6 Gb/Ex tb IIIC T80°C Db IP68, For explosive gas atmospheres, the maximum surface temperature is 85°C; For flammable dust atmospheres, the maximum surface temperature is 80°C; IIC: for explosive gas atmospheres other than mines susceptible to firedamp; For explosive gas mixture atmospheres: Zone 1, Zone 2, Zone 21, Zone 22.

▪ DORI

The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4:2015.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
Distance (Tele)	2400.0 m (7874.0 ft)	952.4 m (3124.7 ft)	480.0 m (1574.8 ft)	240.0 m (787.4 ft)

DS-2XE2707CB-M1 2(316L)	DS-1751ZJ-AC(OS)	DS-2XE2705-M04(3 16L)	DS-2XE2601-10-Y(S S)
 A square metal enclosure with a circular top cover, two handles, and several ports on the side.	 A rectangular metal plate with a central hole and three curved mounting tabs on the right side.	 A circular metal enclosure with four ports on the side and two mounting tabs at the bottom.	 A black flexible cable with metal connectors at both ends, curved into an arc.

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