

DS-2DYH2A0LXG-LW/12
2 MP 100 × DarkFighter Laser Network Positioning System

DarkFighter ✦

ColorVu



- Dual-lens positioning system captures a large area and great details at the same time
- High quality imaging with an F1.0 24/7 colorful lens in panoramic channel, and 1/1.8" 1000 mm lens in PTZ channel
- Supports up to 3 km laser, optical defog, and OIS to enhance the video quality
- Supports Picture-in-Picture mode. Video in two channels can be output in one stream in order to reduce the bandwidth and save the storage space
- Support magnetic correction function. With closed-loop high-precision motor control technology, the PTZ moves back to the original position when the image offsets
- Supports optical image stabilization (OIS) and the anti-jitter compensation angle reaches the 30% of the FOV to reduce the image shaking
- Supports Smart Event, Face Capture, Multi-Target-Type Detection, Multi-Target-Type Comparison, and AI Open Platform

▪ Specification

Camera	
Image Sensor	[Panoramic channel] 1/1.8 " progressive scan CMOS [PTZ channel] 1/1.8 " progressivescan CMOS
Min. Illumination	[Panoramic channel] Color:0.005 Lux @ (F1.0 , AGC ON) [PTZ channel] 0.005 Lux @ (F3.0, AGC ON); B/W: 0.0005 Lux @(F3.0, AGC ON); 0 Lux with IR
Shutter Speed	1/1 s to 1/30,000 s
Slow Shutter	yes
Day & Night	[Panoramic channel] No [PTZ channel] ICR
Zoom	[Panoramic channel] No [PTZ channel] 100 × optical, 16 × digital
Max. Resolution	[Panoramic channel] 1920 × 1080 [PTZ channel] 1920 × 1080
Lens	
Focus	Auto, semi-auto, manual
Focal Length	[Panoramic channel] 4 mm [PTZ channel] 10 to 1000 mm
FOV	[Panoramic channel] Horizontal FOV 44.7°, vertical FOV 88.7°, diagonal FOV 107.4° [PTZ channel] Horizontal FOV 29.8° to 0.6°, vertical FOV 16.9° to 0.3°, diagonal FOV 32.3° to 0.7°
Aperture	[Panoramic channel] F1.0 [PTZ channel] F3.0
Illuminator	
Supplement Light Type	IR,Laser
Supplement Light Range	Laser distance: up to 3000 m
PTZ	
Movement Range (Pan)	360°
Movement Range (Tilt)	+45° ~ -70°
Pan Speed	configurable from 0.1° to 30°/s
Tilt Speed	configurable from 0.1° to 15°/s
Proportional Pan	yes
Presets	300
Patrol Scan	8 patrols
Pattern Scan	4 pattern scans
Power-off Memory	yes
Park Action	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan
3D Positioning	yes
PTZ Status Display	yes
Preset Freezing	yes
Scheduled Task	preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, auxiliary output

Video	
Main Stream	[Panoramic channel] 50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) [PTZ channel] 50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720)
Sub-Stream	[Panoramic channel] 50Hz: 25 fps (704 × 576, 640 × 480, 352 × 288) 60Hz: 30 fps (704 × 480, 640 × 480, 352 × 240) [PTZ channel] 50Hz: 25 fps (704 × 576, 640 × 480, 352 × 288) 60Hz: 30 fps (704 × 480, 640 × 480, 352 × 240)
Third Stream	[Panoramic channel] 50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) [PTZ channel] 50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720)
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
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
Scalable Video Coding (SVC)	yes
Region of Interest (ROI)	yes
Audio	
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
Network	
Client	iVMS-4200
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, WebSocket, WebSockets
API	ONVIF, ProfileS, ProfileG, ProfileT, ISAPI, SDK, ISUP
User/Host	32
Security	Authenticated username and password,MAC address binding,HTTPS encryption,802.1X authenticated access,IP address filter
Web Browser	IE11 , Chrome 57.0+ , Firefox 52.0+ , Safari 12+
Image	
Image Stabilization	[Panoramic channel]: EIS,[PTZ channel]: OIS/EIS (Built-in gyroscope to improve EIS performance)
Day/Night Switch	[Panoramic channel] No [PTZ channel] Day, Night, Auto, Schedule
Image Enhancement	BLC, HLC, 3D DNR
Wide Dynamic Range (WDR)	120 dB WDR
Defog	[Panoramic channel] no [PTZ channel] optical defog
Regional Exposure	yes
Regional Focus	[Panoramic channel] no [PTZ channel] yes
Image Settings	Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by client software or web browser.
Image Parameters Switch	yes

Privacy Mask	up to 24 masks, mosaic mask, mask color configurable
SNR	≥52 dB
Supplement Detection	
Satellite Positioning	GPS, Beidou
Compass	Yes
Interface	
Ethernet Interface	1 RJ45 10M/100M self-adaptive Ethernet port
On-board Storage	Built-in memory card slot, supports MicroSD/MicroSDHC/MicroSDXC card, up to 512 GB
Alarm	7 alarm inputs, 2 alarm outputs
Audio	1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: 1 KΩ ± 10%; 1 output (line out), line level, output impedance: 600 Ω
RS-485	Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive
Event	
Smart Tracking	Manual tracking, auto-tracking
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error), alarm input and output, vandal-proof alarm
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection
Alarm Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture
Deep Learning Function	
Multi-Target-Type Detection	Supports simultaneous detection and capture of human body, face and vehicle
Face Comparison	Recognizes face identity via face modeling, grading and comparing to those in face library
Face Capture	Supports detecting, tracking, capturing, grading, selecting of face in motion, and outputs the best face picture
General	
Power	48 VDC ± 25%, max. 250 W
Vandal-proof Alarm	Yes
General Function	mirror, password protection, watermark, IP address filter
Operating Condition	-40°C ~70°C (-40 °F to 158 °F); Humidity 95% or less (non-condensing)
Wiper	yes
Dimension	584.5 mm × 406 mm × 615 mm (23.01" × 15.98" × 24.12")
Weight	Approx. 50 kg (110.25 lb.)
Approval	
Protection	IP66 (IEC 60529-2013)

▪ 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.

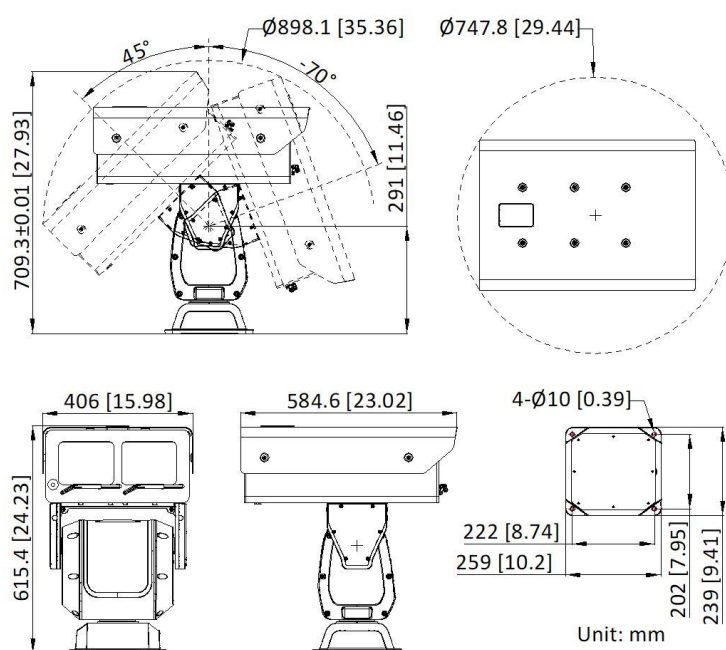
DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m

[PTZ channel] Distance (Tele)	10880.0 m (35,700.48 ft.)	4317.5 m (14,164.48 ft.)	2176.0 m (7,139.11 ft.)	1088.0 m (3,570.22 ft.)
[Panoramic channel] Distance	77.0 m (252.62 ft.)	30.5 m (100.07 ft.)	15.4 m (50.52 ft.)	7.7 m (25.26 ft.)

▪ Available Model

DS-2DYH2A0LXG-LW/12(F1)

▪ Dimension



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