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Hikvision has been dedicated to develop products with security since established.

Hikvision always follows security by design principle and has adopted many methods of security technologies into our product development lifecycle, including terminal security, data security, application security, network security, and privacy protection. In the meantime, the security technologies used by Hikvision are all in compliance with local applicable laws and safety regulations. These security measures could enhance product's cyber security defense capability and protect your devices as well as your data from malicious cyber attacks.

- Captures a large area and great details at the same time
- High quality imaging with 6 MP resolution for bullet channel
- 24/7 colorful imaging and excellent low-light performance with DarkFighter 2.0 technology
- Panoramic channel tilt adjustable from 12° to 24°
- Secures an expansive area with 42 × optical zoom and 16 × digital zoom
- Expansive night view with up to 30 m white light distance and 300 m IR distance
- Supports deep learning functions
- Water and dust resistant (IP67) and vandal resistant (IK10) excluding glass window
- Audio visual alarm: The white flashing light and audible warning can be triggered by certain events



Specification

Camera					
Image Sensor	[Bullet channel] 1/2.5" Progressive Scan CMOS, [PTZ channel] 1/1.8" Progressive Scan CMOS				
Min. Illumination	 [Panoramic channel] Color: 0.0005 Lux @ (F1.0, AGC ON), B/W: 0.0001 Lux @ (F1.0, AGC ON), 0 Lux with light, [PTZ channel] Color: 0.0003 Lux @ (F1.2, AGC ON), B/W: 0.0001 Lux @ (F1.2, AGC O 0 lux with IR 				
Shutter Speed	1 s to 1/30000 s				
Slow Shutter	Yes				
Day & Night	[Panoramic channel] Day, Night, Schedule, Auto, [PTZ channel] Day, Night, Schedule, Auto				
Zoom	[PTZ channel] 42 × optical, 16 × digital				
Max. Resolution	[Panoramic channel] 3680 × 1656, [PTZ channel] 2688 × 1520				
Lens					
FOV	[Panoramic channel] horizontal field of view: 190° ± 5°, vertical field of view: 80°±5°, [PTZ channel] horizontal field of view: 59° to 2°, vertical field of view: 34.2° to 11°, diagonal field of view: 67.1° to 2.3°				
Zoom Speed	[Panoramic channel] No, [PTZ channel] approx. 5.6 s				
Focus	Auto, semi-auto, manual				
Focal Length	[Panoramic channel] 2.8 mm, [PTZ channel] 6 to 252 mm				
Aperture	[Panoramic channel] F1.0, [PTZ channel] F1.3				
Illuminator					
Supplement Light Range	[Panoramic channel] white light: up to 30 m, [PTZ channel] IR: up to 300 m				
Smart Supplement Light	Yes				
PTZ					
Movement Range (Pan)	360° endless				
Movement Range (Tilt)	[Panoramic channel] 12° to 24°, [PTZ channel] -20° to 90°				
Pan Speed	[PTZ channel] pan speed: configurable from 0.1° to 160°/s, preset speed: 240°/s				
Tilt Speed	[PTZ channel] tilt speed: configurable from 0.1° to 120°/s, preset speed 200°/s, [Panoramic channel] tilt speed configurable				
Proportional Pan	[Panoramic channel] No, [PTZ channel] Yes				
Presets	300				
Patrol Scan	8 patrols, up to 32 presets for each patrol				
Pattern Scan	4 pattern scans, record time over 10 minutes for each scan				
Power-off Memory	Yes				
Park Action	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panoram 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, aux output				



Video						
	[Panoramic channel] 50 Hz: 25 fps (3680 × 1656,3632 × 1632), 60 Hz: 30 fps (3680 ×					
	1656, 3632 × 1632)					
Main Stream	[PTZ channel] 50 Hz: 50 fps (2688 × 1520, 2560 × 1440), 100 fps (1920 × 1080, 1280 × 960, 1280 × 720), 60 Hz: 60 fps (2688 × 1520, 2560 × 1440), 120 fps (1920 × 1080, 1280 × 960, 1280 × 720)					
	*High frame rate is supported under monitoring mode only.					
	[PTZ channel] 50 Hz: 25 fps (704 × 576 , 640 × 480 , 352 × 288), 60 Hz: 30 fps (704 ×					
Sub-Stream	576, 640 × 480, 352 × 288),[Panoramic channel] 50 Hz: 25 fps (1200 × 536、960x432),					
	60 Hz: 30 fps (1200 × 536、960x432)					
Third Stream	[PTZ channel] 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),[Panoramic channel] No					
	Main stream: H.265+/H.265/H.264+/H.264,					
Video Compression	Sub-stream: H.265/H.264/MJPEG,					
	Third stream: H.265/H.264/MJPEG					
Video Bit Rate	32 Kbps to 16 Mbps					
Н.264 Туре	Baseline profile, Main profile, High profile					
Н.265 Туре	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,AAC-LC,MP3					
Audio Bit Rate	32 to 192 Kbps (MP2L2),16 to 64Kbps (AAC-LC),64 Kbps (G.711),16 Kbps (G.726),16					
	Kbps (G.722.1),8-48 Kbps (PCM)					
Audio Sampling Rate	8 kHz,16 kHz,32 kHz,48 kHz					
Environment Noise Filtering	Yes					
Network						
API	ONVIF (Profile S, Profile G, Profile T, Profile M),ISUP,ISAPI,SDK,OTAP					
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)					
Protocols	IPv4/IPv6,HTTP,HTTPS,802.1X,QoS,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,RTP,T CP/IP,UDP,IGMP,ICMP,DHCP,PPPoE,Bonjour,FTP					
Simultaneous Live View	Up to 20 channels					
User/Host	Up to 32 users. 3 user levels: administrator, operator, and user					
	Password protection, complicated password, HTTPS encryption, IP address filter, 802.1X					
Security	authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, host authentication (MAC address), TPM 2.0 (FIPS 140-2 level 2)					
Client	iVMS-4200,HikCentral Pro,Hik-Connect					
	Plug-in required live view: IE8+					
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+					
	Local service: Chrome 41.0+, Firefox 30.0+					
Image						
Wide Dynamic Range (WDR)	VDR) [Bullet channel] 120 dB, [PTZ channel] 150 dB					



Day/Night Switch	Day,night,auto,schedule				
Privacy Mask	[Panoramic channel] 8 programmable polygon privacy masks, [PTZ channel] 24				
	programmable polygon privacy masks; mask color or mosaic configurable				
Image Enhancement	HLC,3D DNR				
Defog	Optical defog				
Image Stabilization	EIS (Built-in gyroscope to improve EIS performance)				
Regional Exposure	Yes				
Regional Focus	[Panoramic channel] No, [PTZ channel] Yes				
Imaga Sattings	Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by				
Image Settings	client software or web browser				
Image Parameters Switch	Yes				
SNR	≥ 52 dB				
Supplement Detection					
Satellite Positioning	No				
Gyroscope	Yes				
Compass	No				
Interface					
Built-in Speaker	1 built-in speaker				
Ethernet Interface	1 RJ45 100M self-adaptive Ethernet port				
On-board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB.				
Alarm	7 input(s), 2 output(s)				
A 11	1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: 1 K Ω ± 10%,				
Audio	1 output (line out), line level, output impedance: 600 Ω				
RS-485	1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)				
Reset	Yes				
Event					
Basic Event	[PTZ channel & panoramic channel] alarm input and output, exception,[PTZ channel] motion detection, video tampering alarm				
	[Panoramic channel] line crossing detection, intrusion detection, region entrance				
Smart Event	detection, region exiting detection, [PTZ channel] line crossing detection, intrusion				
	detection, region entrance detection, region exiting detection				
	[Panoramic channel] Upload to FTP/NAS/memory card, notify surveillance center, send				
	email, trigger alarm output, trigger recording, audible warning, white light flashing,				
Linkage	[PTZ channel] Upload to FTP/NAS/memory card, notify surveillance center, send email,				
	trigger alarm output, trigger recording, and PTZ actions (such as preset, patrol scan,				
	pattern scan)				
Deep Learning Function					
Face Capture	Detects up to 30 faces simultaneously,				
i ace capiule	Uploads face with background and closed-up face pictures				
	Up to 10 face libraries. 30000 faces for each library. 150000 faces in total,				
Face Comparison	Recognizes face identity via face modeling, grading and comparing to those in face				
	library,				
	Supports face library encryption				



	Smart Function: Support license plate recognition of vehicles and motorcycles (only in checkpoint			
	scenario)			
	Support vehicle attribute detection, including vehicle type, color, brand, driving			
	direction, etc.			
	Support vehicle and non-vehicle counting			
	Blocklist and allowlist: up to 10,000 records			
	LPR Countries/Regions:			
Road Traffic and Vehicle	4 areas (Europe, Middle East, Asia-Pacific, Africa) and more than 124 countries/regions			
Detection	Accuracy (Under recommended installation and lighting conditions):			
	License plate recognition rate \geq 98%			
	Capture rate ≥99%			
	Driving direction accuracy rate ≥98%			
	Vehicle Capture Speed:			
	Front installation in checkpoint scenario: up to 120 km/h			
	Side installation: up to 80 km/h			
	Capture Mode: License Plate and Vehicle Mode, Vehicle Priority Mode			
	Supports simultaneous detection and capture of human body, face and vehicle,			
Multi-Target-Type Detection	Gets 7 face features, 14 human body features and 8 vehicle features			
	Line crossing detection, region entrance detection, intrusion detection, region exiting			
Perimeter Protection	detection			
Linkage and Tracking				
Smart Tracking	Manual tracking, auto-tracking 3.0			
Smart Linkage	Manual tracking, tracking takeover, linked tracking capture			
	Support person arming. When the device detects the armed face or human body in the			
	monitoring scene, it triggers alarms, and tracks and captures the target. During the			
Object Tracking	tracking, the target location and other related information are uploaded.Support			
object Hucking	vehicle arming. When the device detects the armed vehicles in the monitoring scene, it			
	triggers alarms, and tracks and captures the target. During the tracking, the target			
	location and other related information are uploaded.			
General				
General Function	mirror, password protection			
	36 VDC± 25%, max. 90 W (Max. 62 W, including max. 12 W for IR and max. 8 W for			
Power	heater)			
	PoE 802.3bt, type4, class8, max. 90W (Max. 62 W, including max. 12 W for IR and max.			
	8 W for heater)			
Operating Condition	-40 °C to 70 °C (-40 °F to 158 °F). Humidity 95% or less (non-condensing), For speaker:			
	-30 °C to 55°C (-22°F to 131°F)			
Wiper	Yes			
Demist	Yes			
Material	ADC12			
Dimension	Ø290 mm × 453.2 mm (Ø11.42" × 17.84")			
Weight	Approx. 10.5 kg (23.15 lb.)			
	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian,			
Language	Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,			
	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese,			
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian			



Approval				
EMC	CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013 + A1: 2019, EN			
	50130-4: 2011 + A1: 2014),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)			
Environment	CE-RoHS (2011/65/EU),WEEE (2012/19/EU),Reach (Regulation (EC) No 1907/2006)			
Protection	IP67 (IEC 60529-2013), TVS 6000 V lightning protection, surge protection and voltage			
FIOLECLION	transient protection, IK10 (IEC 62262:2002, excluding glass window)			
Anti-Corrosion Protection	NEMA 4X (NEMA 250-2018)			

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.

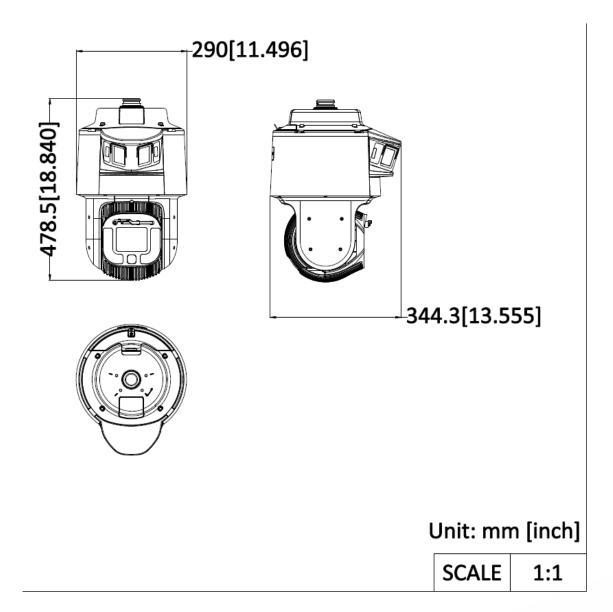
DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
[Bullet channel]	77.0m	30.5m	15.4m	7.7m
Distance				
[PTZ channel]	2965.5m	1176.8m	593.1m	296.6m
Distance (Tele)	2903.311			

Available Model

DS-2SF8C442MXG1-ELWY/26(F0)

Dimension





Accessory

Optional



See Far, Go Further



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