

## Specification

Camera Module			
Image Sensor	1/2.8" progressive scan CMOS		
Min. Illumination	Color: 0.002 Lux @(F1.2, AGC ON)		
	B/W: 0.0002 Lux @(F1.2, AGC ON)		
Shutter Time	1/1 s to 1/30,000 s		
White Balance	Auto/Manual/ATW (Auto-tracking White Balance)/Indoor/Outdoor/Fluorescent Lamp/Sodium Lamp		
AGC	Auto/Manual		
Day & Night	IR cut filter		
Digital Zoom	16×		
Privacy Mask	24 programmable polygon privacy masks		
Focus Mode	Auto/Semi-automatic/Manual		
3D DNR	Yes		
BLC	Yes		
HLC	Yes		
WDR	120 dB		
Defog	Yes		
EIS	Yes		
Regional Exposure	Yes		
Regional Focus	Yes		
Lens			
Focal Length	4.8 mm to 153 mm, 32× Optical		
Zoom Speed	Approx. 5.6 s (optical lens, wide-tele)		
Field of View	Horizontal field of view: 58.4° to 2.14° (wide-tele) Vertical field of view: 33.8° to 1.2° (wide-tele)		
	Diagonal field of view: 65.6° to 2.46° (wide-tele)		
Working Distance	10 mm to 1500 mm (wide-tele)		
Aperture Range	F1.2 to F4.4		
PTZ			
Movement Range (Pan)	360° endless		
Pan Speed	Configurable, from 0.1°/s to 300°/s, Preset Speed: 540°/s		
Movement Range (Tilt)	From -5° to 90°		
Tilt Speed	Configurable, from 0.1°/s to 240°/s, Preset Speed: 400°/s		
Proportional Zoom	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/Panorame 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		
Smart Features			



	Intrusion, Line Crossing, Region Entrance, Region Exiting		
Perimeter Protection	Support alarm triggering by specified target types (human and vehicle)		
	Filtering out mistaken alarm caused by target types such as leaf, light, animal, and flag, etc.		
Event Detection	Unattended Baggage Detection, Object Removal Detection, Face Detection, Audio Exception Detection		
Smart Tracking	Manual Tracking, Auto Tracking (support tracking specified target types such as human an vehicle), Event Tracking		
Smart Record	ANR (Automatic Network Replenishment), Dual-VCA		
ROI	Eight fixed regions for each stream		
Network			
Max. Resolution	1920 × 1080		
Main Stream	50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720) 50fps (1920 × 1080, 1280 × 960, 1280 × 720) 60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720) 60fps (1920 × 1080, 1280 × 960, 1280 × 720)		
Sub-Stream	50Hz: 25fps (704 × 576, 640 × 480, 352 × 288) 60Hz: 30fps (704 × 480, 640 × 480, 352 × 240)		
Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)   60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240)		
SVC	Yes		
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 with Baseline/Main/High Profile		
Audio compression	G.711alaw/G.711ulaw/G.722.1/G.726/MP2L2/PCM		
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, UDP, IGMP, ICMP, Bonjour		
Simultaneous Live View	Up to 20 channels		
User/Host	Up to 32 users 3 levels: Administrator, Operator and User		
Security Measures	User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering		
System Integration			
Alarm Interface	7-ch alarm input/2-ch alarm output		
Audio Interface	1-ch audio input, 2 to 2.4 V[p-p], 1 K $\Omega$ $\pm$ 10% 1-ch audio output, line level, impedance: 600 $\Omega$		
Alarm Linkage	Alarm actions, such as Preset, Patrol Scan, Pattern Scan, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card/NAS, Send Email, etc.		
Network Interface	1 RJ45 10 M/100 M Ethernet Interface; Hi-PoE		
BNC	1.0V [p-p]/75 Ω, NTSC (or PAL) composite		
RS-485	HIKVISION, Pelco-P, Pelco-D, self-adaptive		
Storage	Built-in memory card slot, support Micro SD/SDHC/SDXC, up to 256 GB; NAS (NFS, SMB/ CIFS), ANR		
API	Open-ended, support ONVIF, and CGI, support HIKVISION SDK and Third-Party Management Platform		
Client	iVMS-4200, iVMS-4500, iVMS-5200, Hik-Connect		
Web Browser	IE 8 to 11, Chrome 31.0 to 44, Firefox 30.0 to 51		
General			



Power	Indoor model: 24 VAC (max. 25 W), Hi-PoE (max. 25 W)	
	Outdoor model: 24 VAC (max. 60 W, including max. 40 W for heater), Hi-PoE (max. 50 W, including max. 20 W for heater)	
Working Temperature	-40°C to 70°C (-40°F to 158°F) (Outdoor)	
	-10°C to 50°C (14°F to 122°F) (Indoor)	
Working Humidity	≤ 90%	
Protection Level	IP66 Standard (Outdoor), IK10, 6000V Lightning Protection, Surge Protection and Voltage Transient Protection	
Dimensions	Φ 220 mm × 302 mm (Φ 8.66" × 11.89") (Outdoor)	
	Φ 245.1 mm × 239 mm (Φ 9.65" × 9.41") (Indoor)	
Weight	Approx. 4 kg (8.82 lb) (Outdoor)	
	Approx. 3.4 kg (7.50 lb) (Indoor)	

## 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)	2046.9 m (6715.5 ft)	812.3 m (2664.9 ft)	409.4 m (1343.1 ft)	204.7 m (671.6 ft)

## Order Model

DS-2DF5232X-AEL	(D), 24 VAC & Hi-PoE (Outdoor)
DS-2DF5232X-AE3	(D), 24 VAC & Hi-PoE (Indoor)

## Dimensions