DS-2SF7C420MXG0-ELW/2C

TandemVu 7C Series Panoramic 4 MP 20X DarkFighter Network Speed Dome

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 12 MP resolution for bullet channel

- 24/7 colorful imaging and excellent low-light performance with DarkFighter technology

- Bullet channel tilt adjustable from 12° to 24°

- Secures an expansive area with 20 × optical zoom and 16 × digital zoom

- Expansive night view with up to 30 m white light distance and 250 m IR distance

- Supports deep learning functions

- Water and dust resistant (IP67)

▪ Specification

Camera	
Image Sensor	[Bullet channel] 1/1.8" Progressive Scan CMOS, [PTZ channel] 1/1.8" Progressive Scan CMOS
Min. Illumination	[Bullet 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: 0.0005 Lux @ (F1.0, AGC ON), B/W: 0.0001 Lux @ (F1.0, AGC ON), 0 lux with IR
Shutter Speed	1/25 s to 1/30000 s
Slow Shutter	Yes
Day & Night	[Bullet channel] Color, [PTZ channel] IR cut filter
Max. Resolution	[Bullet channel] 5344 × 2256, [PTZ channel] 2688 × 1520
Lens	
Focus	Auto, semi-auto, manual
Zoom Speed	[Bullet channel] No, [PTZ channel] approx. 4.8 s
Focal Length	[Bullet channel] 2.8 mm, [PTZ channel] 12 to 240 mm
FOV	[Bullet channel] horizontal field of view: 190° ± 5°, vertical field of view: 75° ± 5°, diagonal field of view: 195° ± 5°, [PTZ channel] horizontal field of view: 30.7° to 2.8°, vertical field of view: 17.6° to 1.6°, diagonal field of view: 69.18° to 2.35°
Aperture	[Bullet channel] F1.0, [PTZ channel] F1.0
Illuminator	
Supplement Light Range	[Bullet channel] White light: up to 30 m, [PTZ channel] white light: up to 30 m, IR: up to 250 m
Smart Supplement Light	Yes
PTZ	
Movement Range (Pan)	[PTZ channel] 0° to 360°
Movement Range (Tilt)	[Bullet 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	[Bullet channel] tilt speed configurable, [PTZ channel] tilt speed: configurable from 0.1° to 120°/s, preset speed 200°/s
Proportional Pan	[Bullet 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, 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, aux output

Video

Main Stream	[Bullet channel] 50 Hz: 25 fps (5344 × 2256，4384 × 1856，3680 × 1656), 60 Hz: 24 fps (3840 × 1080),[PTZ channel] 50 Hz: 25 fps (2688 × 1520, 2560 × 1440，1920 × 1080，1280 × 960，1280 × 720, 2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720), 60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720)
Sub-Stream	[Bullet channel] 50 Hz: 25 fps (1336 × 564, 960 × 432), 60 Hz: 25 fps (1336 × 564, 960 × 432),[PTZ channel] 50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288), 60 Hz: 30 fps (704 × 480, 640 × 480, 352 × 240)
Third Stream	[Bullet channel] No,[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)
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,AAC-LC
Audio Bit Rate	16 to 64Kbps (AAC-LC),32 to 192 Kbps (MP2L2)
Audio Sampling Rate	8 kHz,16 kHz,32 kHz,48 kHz
Environment Noise Filtering	Yes

Network

API	ISUP,ISAPI,SDK,Open Network Video Interface (Profile S, Profile G, Profile T)
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,TCP/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
Security	Password protection,complicated password,IP address filter,HTTPS encryption,802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5),host authentication (MAC address),watermark
Client	iVMS-4200,HikCentral Pro,Hik-Connect
Web Browser	Plug-in required live view: IE 10, IE 11 Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+ Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+

Image

Day/Night Switch	Day,night,auto,schedule
Image Enhancement	HLC,3D DNR
Wide Dynamic Range (WDR)	[Bullet channel] No, [PTZ channel] 120 dB
Defog	Optical defog
Image Stabilization	EIS
Regional Exposure	Yes

Regional Focus	[Bullet 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	[Bullet channel] No, [PTZ channel] 24 programmable polygon privacy masks; mask color or mosaic configurable
SNR	≥ 52 dB
Supplement Detection	
Satellite Positioning	No
Gyroscope	Yes
Compass	No
Interface	
Ethernet Interface	1 RJ45 1000M self-adaptive Ethernet port
On-board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB
Alarm	7 input(s), 2 output(s)
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	1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Reset	Yes
Event	
Basic Event	video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error), alarm input and output, audio except detection
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection
Linkage	[Bullet channel] no, [PTZ channel] Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, audible warning, white light flashing, and PTZ actions (such as preset, patrol scan, pattern scan)
Smart Tracking	[PTZ channel] yes
Smart Linkage	tracking takeover, linked tracking capture, panorama linkage
Deep Learning Function	
Multi-Target-Type Detection	[Bullet channel] no, [PTZ channel] Supports simultaneous detection and capture of human body, face and vehicle
General	
General Function	mirror, password protection
Power	36 VDC ± 25%, max. 60 W
Operating Condition	-40 ℃ to 70 ℃ (-40 ℉ to 158 ℉). Humidity 95% or less (non-condensing), For speaker: -30 ℃ to 55℃ (-22℉ to 131℉)
Wiper	Model with -W: Yes, Model without -W: No
Demist	Yes
Material	ADC12
Dimension	Ø260 mm × 382.69 mm (Ø10.24" × 15.07")
Weight	Approx. 7.1 kg (15.65 lb.)
Language	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, 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

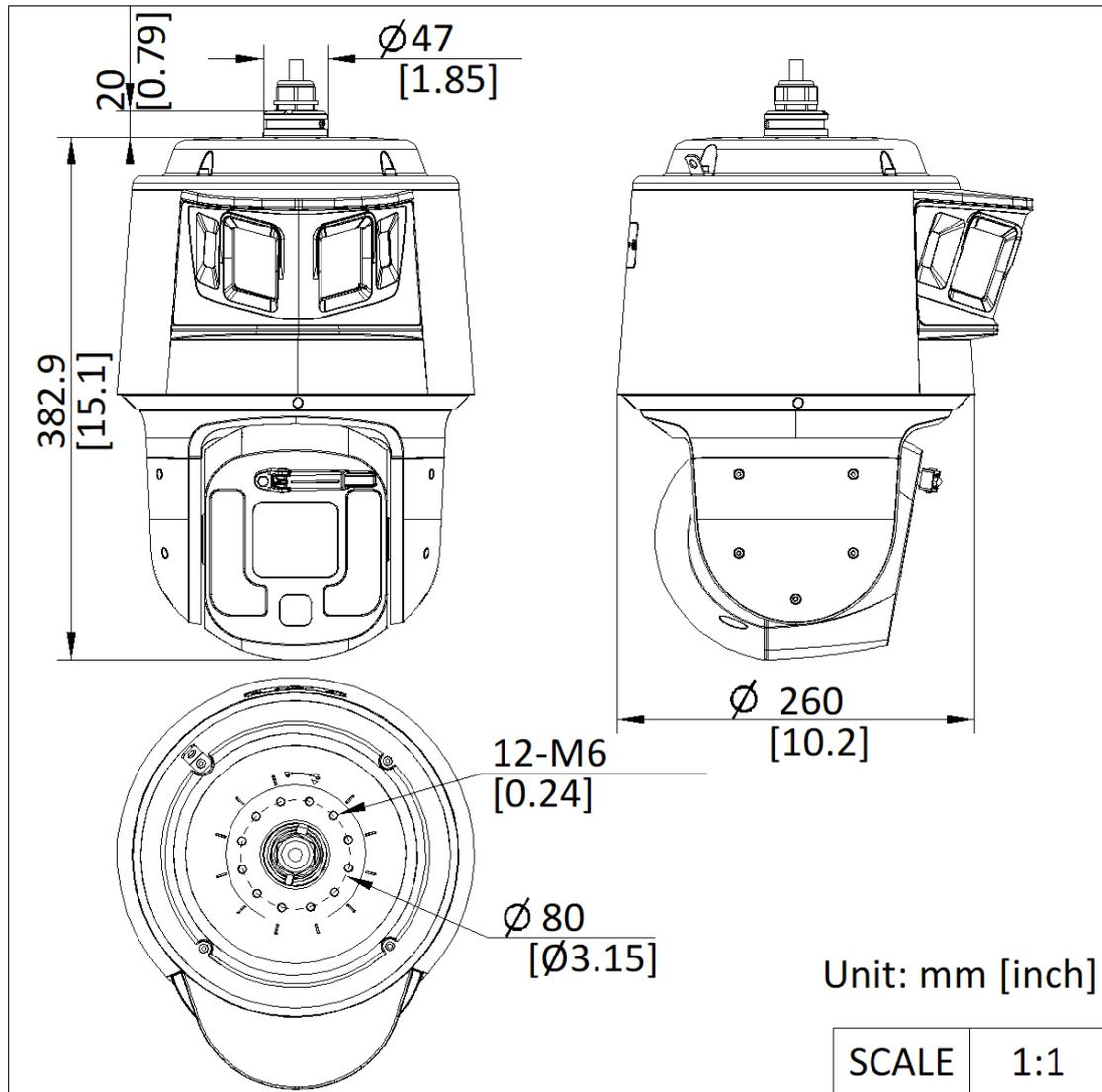| Approval	
EMC	CE-EMC (EN 50130-4:2011+A1:2014, EN 55032:2015+A11:2020+A1:2020, EN 61000-3-3:2013+A1:2019+A2:2021, EN IEC 61000-3-2:2019+A1:2021)
Safety	CE-LVD (EN 62368-1:2014 + A11:2017),CB (IEC 62368-1:2014)
Environment	CE-RoHS (2011/65/EU and its amendment (EU)2015/863)
Protection	IP67 (IEC 60529:1989+AMD1:1999+AMD2:2013) TVS 6000 V Lightning Protection, Surge Protection and Voltage Transient Protection
Anti-Corrosion Protection	Model with -Y: NEMA 4X (NEMA 250-2018), Model without -Y: No

▪ 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 6267 6-4: 2015.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
[Bullet channel] Distance	56m	22.2m	11.2m	5.6m
[PTZ channel] Distance (Tele)	3310.3m	1313.6m	662.1m	331.05m

▪ Available Model
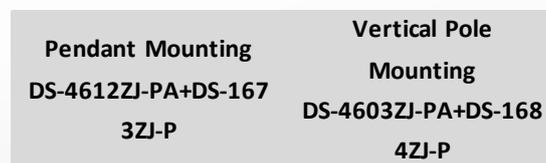
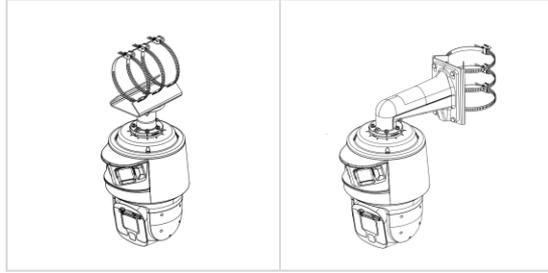DS-2SF7C420MXG0-ELW/2C(F0)

▪ Dimension

20 [0.79]
Ø47 [1.85]
382.9 [15.1]
Ø 260 [10.2]
12-M6 [0.24]
Ø 80 [Ø3.15]
Unit: mm [inch]

SCALE	1:1

▪ **Accessory**

▪ **Optional**

DS-4612ZJ-PA	DS-4603ZJ-PA

▪ **Installation Methods**

Pendant Mounting DS-4612ZJ-PA+DS-1673ZJ-P	Vertical Pole Mounting DS-4603ZJ-PA+DS-1684ZJ-P

See Far, Go Further

HIKVISION®