



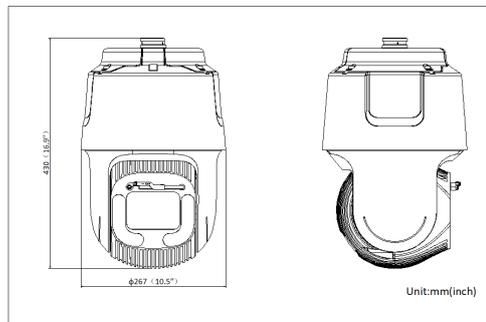
# A-ISO4428AIR-NC

4 MP 42 × Network  
IR Speed Dome

## Product Highlights

- 1/1.8" progressive scan CMOS
- High quality imaging with 4 MP resolution
- Excellent low-light performance with DarkFighter technology
- 42× optical zoom and 16× digital zoom provide close up views over expansive areas
- Expansive night view with up to 400 m IR distance
- Water and dust resistant (IP67) and vandal resistant (IK10) excluding glass window
- Supports face capture to detect, capture, grade, and select faces in motion
- Supports road traffic to detect vehicles
- Smart Pan-Tilt Correction

## Dimension & Accessories



Wall mount

Pendant Mount

Pendant Mount

Vertical pole mount

# Technical Specifications

## Camera

Image Sensor	1/1.8" progressive scan CMOS
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON), B/W: 0.0005 Lux @ (F1.2, AGC ON), 0 Lux with IR
Shutter Speed	1/1 s to 1/30,000 s
Slow Shutter	Yes
Day & Night	IR cut filter
Zoom	42x optical, 16x digital
Max. Resolution	2560 × 1440
<b>Lens</b>	
Focus	Auto, semi-auto, manual, rapid focus
Focal Length	6.0 mm to 252 mm
Zoom Speed	Approx. 4.5 s
FOV	Horizontal field of view: 56.6° to 1.7° (wide-tele), Vertical field of view: 33.7° to 0.9° (wide-tele), Diagonal field of view: 63.4° to 1.9° (wide-tele)
Aperture	Max. F1.2
<b>Illuminator</b>	
Supplement Light Type	IR
Supplement Light Range	up to 400 m
Smart Supplement Light	Yes
<b>PTZ</b>	
Movement Range (Pan)	360°, Smart Pan-Tilt Correction
Movement Range (Tilt)	-20° to 90° (auto flip), Smart Pan-Tilt Correction
Pan Speed	Pan speed: configurable from 0.1° to 210°/s; preset speed: 280°/s
Tilt Speed	Tilt speed: configurable from 0.1° to 150°/s, preset speed 250°/s
Proportional Pan	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

# Technical Specifications

<b>Video</b>	
Main Stream	50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720); 60 Hz: 30 fps (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 16384 Kbps
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
<b>Audio</b>	
Audio Compression	G.711alaw, G.711ulaw, G.722.1, G.726, MP2L2, PCM, AAC_LC
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2) 16 Kbps to 64 Kbps(AAC_LC)
<b>Network</b>	
Network Storage	NAS (NFS, SMB/ CIFS), ANR
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, WebSocket, WebSockets
API	ISUP, ISAPI, Open Network Video Interface (Profile S, Profile G, Profile T), OTAP
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, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.3, host authentication (MAC address)
Client	VMS Professional
Web Browser	IE11, Chrome 57.0+, Firefox 52.0+, Safari 11+
<b>Image</b>	
Day/Night Switch	Day, night, auto, scheduled-switch
Image Enhancement	BLC, HLC, 3D DNR
Wide Dynamic Range (WDR)	140 dB
Defog	Yes
Image Stabilization	EIS (Built-in gyroscope to improve EIS performance)



## Technical Specifications

Regional Exposure	Yes
Regional Focus	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, rectangle region
SNR	≥ 52 dB
<b>Interface</b>	
Video Output	1.0 V[p-p]/75 Ω, PAL, NTSC, BNC connector
Ethernet Interface	1 RJ45 10M/100M self-adaptive Ethernet port
On-board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC cards, up to 256 GB
Alarm	7 inputs, 2 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, Pelco-P, Pelco-D, self-adaptive
<b>Event</b>	
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, audible warning, and PTZ actions (such as preset, patrol scan, pattern scan)
Basic Event	motion detection, video tampering alarm, alarm input, alarm output, exception
Smart Event	Line crossing detection, region entrance detection, unattended baggage detection, object removal detection, intrusion detection, region exiting detection, vandal-proof alarm, audio exception detection
Smart Tracking	Manual tracking, auto-tracking
<b>Deep Learning Function</b>	
Face Capture	Support detecting up to 30 faces at the same time. Support detecting, tracking, capturing, grading, selecting of face in motion, and output the best face picture of the face
Face Comparison	Yes
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
<b>Road Traffic and Vehicle Detection</b>	
Road Traffic	Support vehicle detection (license plate number, vehicle model, and vehicle color recognition)



# Technical Specifications

General	
Operating Condition	Temperature: -40°C to 70°C (-40°F to 158°F), Humidity: ≤ 95%
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
Power Consumption and Current	24 VAC (Max. 62 W, including max. 12 W for IR and max. 8 W for heater), PoE 802.3 bt (Max. 51 W, including max. 12 W for IR and max. 8 W for heater)
Wiper	Yes. Rain-sensing auto control
Dimension	∅ 267 mm × 430 mm (∅ 10.51" × 16.93")
Weight	Approx. 9.6 kg (21.16 lb.)