

# DI-D21AFH

2 MP AcuSense Motorized Varifocal Dome Network Camera



## AcuSense



Empowered by deep learning algorithms, DiSS AcuSense technology brings human and vehicle targets classification alarms to front- and back-end devices. The system focuses on human and vehicle targets, vastly improving alarm efficiency and effectiveness.

- High quality imaging with 2 MP resolution
- Motorized varifocal lens for easy installation and monitoring
- Clear imaging against strong backlight due to 120 dB WDR technology
- Efficient H.265+ compression technology
- Focus on human and vehicle targets classification based on deep learning
- Water and dust resistant (IP67) and vandal proof (IK10)

## ▪ Specification

Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR
Shutter Time	1/3 s to 1/100,000 s
Day & Night	IR cut filter
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°
Lens	
Depth of Field	0.5 m to ∞
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 107° to 32°, vertical FOV 55° to 18°, diagonal FOV 130° to 36°
Aperture	F1.6
Lens Mount	Ø14
Lens Type	Varifocal lens, motorized lens, 2.8 to 12 mm
Iris Type	Fixed
DORI	
DORI	2.8 to 12 mm: Wide: D: 45.5m, O: 18.1m, R: 9.1m, I: 4.6m Tele: D: 137.9m, O: 54.7m, R: 27.6m, I: 13.8m
Illuminator	
IR Wavelength	850 nm
Supplement Light Type	IR
Supplement Light Range	Up to 40 m
Smart Supplement Light	Yes
Video	
Main Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720) 60 Hz: 30 fps (1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (640 × 480, 640 × 360) 60 Hz: 30 fps (640 × 480, 640 × 360)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)
Video Compression	Main stream: H.265/H.264/H.264+/H.265+, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264
Video Bit Rate	32 Kbps to 8 Mbps
H.264 Type	Baseline Profile, Main Profile, High Profile
H.265 Type	Main Profile
Bit Rate Control	CBR, VBR
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	1 fixed region(s) for main stream and sub-stream
Audio	
Environment Noise Filtering	Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC

Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)
<b>Network</b>	
Simultaneous Live View	Up to 6 channels
API	Open Network Video Interface (Profile S, Profile G, Profile T), ISAPI, SDK
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSocket, WebSockets
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, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.3, host authentication (MAC address)
Network Storage	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)
Client	iVMS-4200, Guarding Vision
Web Browser	Plug-in required live view: IE 10, IE 11, Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Local service: Chrome 57.0+, Firefox 52.0+
<b>Image</b>	
Privacy Mask	Yes
Day/Night Switch	Day, Night, Auto, Schedule
Image Enhancement	BLC, HLC, 3D DNR
Image Parameters Switch	Yes
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
Wide Dynamic Range (WDR)	120 dB
SNR	≥ 52 dB
<b>Interface</b>	
Audio	1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium, 1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium
Alarm	1 input(s), 1 output(s) (max. 24 VDC/24 VAC, 1 A)
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB
Reset Key	Yes
Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
<b>Event</b>	
Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception
Smart Event	Line crossing detection, intrusion detection(support alarm triggering by specified target types (human and vehicle)), face detection
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning

General	
Power	12 VDC ± 25%, 0.88 A, max. 10.5 W, Ø5.5 mm coaxial power plug, reverse polarity protection, PoE: 802.3 af, Class 3, 36 V to 57 V, 0.35 A to 0.22 A, max. 12.5 W
General Function	Heartbeat, anti-flicker, password reset via email, pixel counter
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Material	Upper cover and base: metal, bubble: plastic
Dimension	Ø153.3 mm × 111.6 mm (Ø6.1" × 4.4")
Package Dimension	244 mm × 174 mm × 173 mm (9.7" × 6.9" × 6.9")
Weight	Approx. 880 g (1.9 lb.)
With Package Weight	Approx. 1460 g (3.1 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	FCC: 47 CFR Part 15, Subpart B, CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014, IC: ICES-003: Issue 7, KC: KN32: 2015, KN35: 2015
Safety	UL: UL 62368-1, 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, IK10: IEC 62262:2002

## ▪ Available Model

DI-D21AFH (2.8 to 12 mm)

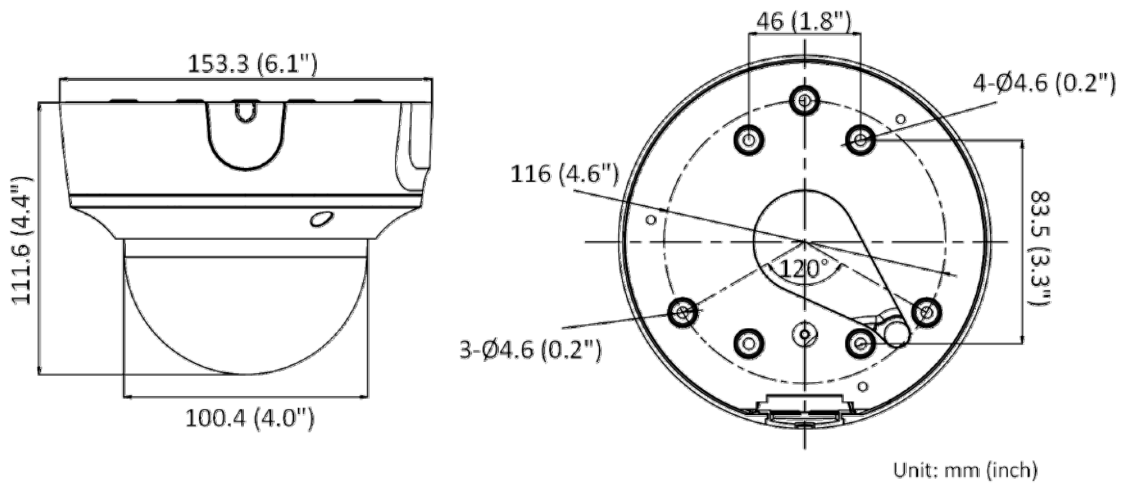
## ▪ Typical Application

DiSS description to choose for your using environment.

This model has NO SPECIFIC PROTECTION.

Level	Description
Top-level protection	DiSS products at this level are equipped for use in areas where professional anticorrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	DiSS products at this level are equipped for use in areas with moderate anticorrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.
No specific protection	DiSS products at this level are equipped for use in areas where no specific anticorrosion protection is needed.

## ▪ Dimension



▪ **Accessory**

▪ **Optional**

DI-1473ZJ-155B Wall Mount	DI-1473ZJ-155 Wall Mount	DI-1280ZJ-DM55 Junction Box	DI-1227ZJ-DM44 Pendant Mount	DI-1476ZJ-SUS Corner Mount
				
<b>DI-1471ZJ-155</b> Pendant Mount	<b>DI-1475ZJ-SUS</b> Vertical Pole Mount			
				