

## DS-2CD2D45G1/M-D/NF 4 MP Mini Network Camera



- High quality imaging with 4 MP resolution
- Efficient H.265+ compression technology to save bandwidth and storage
- Clear imaging against strong back light due to 120 dB true WDR technology
- 3D DNR technology delivers clean and sharp images



## ▪ Specification

Camera	
Image Sensor	1/3" Progressive Scan CMOS
Max. Resolution	2560 × 1440
Min. Illumination	Color: 0.005 Lux @ (F1.2, AGC ON)
Shutter Time	1/3 s to 1/100,000 s
Lens	
Focal Length & FOV	2.8 mm: horizontal FOV: 98°, vertical FOV: 53°, diagonal FOV: 115° 4 mm: horizontal FOV: 75°, vertical FOV: 41.5°, diagonal FOV: 88°
Lens Mount	M12
Iris Type	Fixed
Aperture	2.8 mm: F2.0 4 mm: F2.0
DORI	
DORI	2.8 mm: D: 62 m, O: 24.6 m, R: 12.4 m, I: 6.2 m 4 mm: D: 80 m, O: 31.7 m, R: 16 m, I: 8 m
Video	
Main Stream	50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2560 × 1440, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (640 × 480, 640 × 360, 320 × 240) 60 Hz: 30 fps (640 × 480, 640 × 360, 320 × 240)
Third Stream	50 Hz: 1 fps (1280 × 720, 640 × 480, 640 × 360, 320 × 240) 60 Hz: 1 fps (1280 × 720, 640 × 480, 640 × 360, 320 × 240)
Video Compression	Main stream: H.265/H.264 Sub-stream: H.265/H.264/MJPEG Third stream: H.265/H.264
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
Bit Rate Control	CVR/BVR
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	Support 1 fixed region for main stream
Audio	
Audio Type	Mono
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/16 to 64 Kbps (AAC)
Audio Sampling Rate	8 kHz/16 kHz/32 kHz
Environment Noise Filtering	Yes
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
Simultaneous Live View	Up to 15 channels
API	Open Network Video Interface, ISAPI, SDK, ISUP 5.0
User/Host	Up to 32 users 3 level: administrator, operator, and user

Network Storage	NAS (NFS, SMB/CIFS)
Client	iVMS-4200, Hik-Connect
Web Browser	Plug-in required live view: IE10, IE11 Plug-in free live view: Chrome 57.0+, Firefox 52.0+ Local service: Chrome 57.0+, Firefox 52.0+
<b>Image</b>	
Image Parameters Switch	Yes
Image Settings	Saturation, brightness, contrast, and sharpness adjustable by client software or web browser
Day/Night Switch	Day, Night, Auto, Schedule
Wide Dynamic Range (WDR)	120 dB
Image Enhancement	BLC, HLC, defog, 3D DNR
Privacy Mask	Yes
<b>Interface</b>	
Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
Audio	1 input (line in), 1 output (line out)
Reset Key	Yes
<b>Event</b>	
Basic Event	Motion detection, video tampering alarm, exception (HDD full, HDD error, network disconnected), video quality diagnosis
Smart Event	Intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection Audio exception detection, defocus detection, scene change detection
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture, audible warning
<b>General</b>	
Power	12 VDC $\pm$ 20%, 0.13 A, max. 1.5 W, $\varnothing$ 5.5 mm coaxial power plug
Dimension	31.5 mm $\times$ 31.5 mm $\times$ 49.6 mm (1.2" $\times$ 1.2" $\times$ 2")
Package Dimension	130 mm $\times$ 104 mm $\times$ 85 mm (5.1" $\times$ 4.1" $\times$ 3.3")
Weight	Approx. 93 g (0.2 lb.)
With Package Weight	Approx. 202 g (0.4 lb.)
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)
Language	18 languages: English, Traditional Chinese, Russian, Turkish, Japanese, Korean, Thai, Vietnamese, Estonian, Bulgarian, Hungarian, Czech, Slovak, French, Italian, German, Spanish, Portuguese
General Function	One-key reset, heartbeat, mirror, password protection, privacy mask, rotate, watermark, IP address filter

## Approval

EMC	FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN 50130-4: 2011+A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 62368-1); CB (IEC 62368-1:2014+A11); CE-LVD (EN 62368-1:2014/A11:2017); BIS (IS 13252(Part 1):2010/ IEC 60950-1 : 2005); LOA (IEC/EN 60950-1)
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)

### ▪ Available Model

DS-2CD2D45G1/M-D/NF (2.8/4 mm)

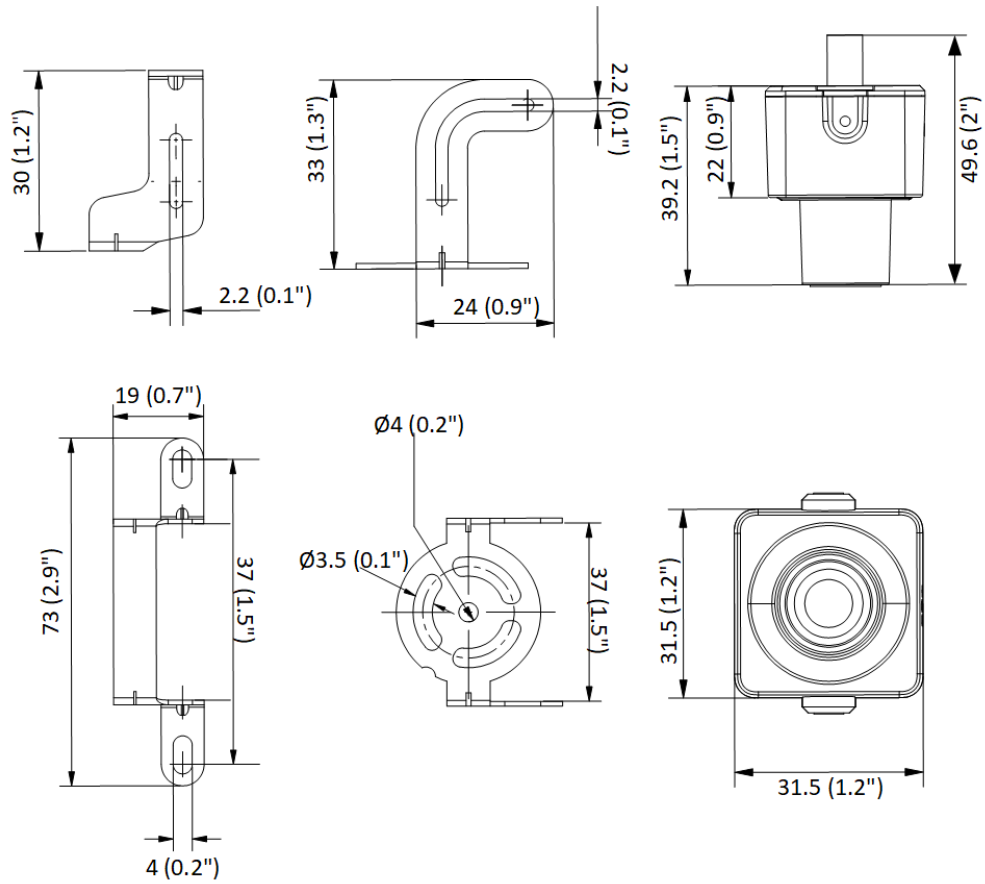
### ▪ Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

This model has NO SPECIFIC PROTECTION.

Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-corrosion 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	Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

Dimension



Unit: mm (inch)

Distributed by

**HIKVISION®****Headquarters**

No.555 Qianmo Road, Binjiang District,  
Hangzhou 310051, China  
T +86-571-8807-5998  
overseasbusiness@hikvision.com

**Hikvision USA**  
T +1-909-895-0400  
sales.usa@hikvision.com

**Hikvision Australia**  
T +61-2-8599-4233  
salesau@hikvision.com

**Hikvision India**  
T +91-22-28469900  
sales@pramahikvision.com

**Hikvision Canada**  
T +1-866-200-6690  
sales.canada@hikvision.com

**Hikvision Thailand**  
T +662-275-9949  
sales.thailand@hikvision.com

**Hikvision Europe**  
T +31-23-5542770  
sales.eu@hikvision.com

**Hikvision Italy**  
T +39-0438-6902  
info.it@hikvision.com

**Hikvision Brazil**  
T +55 11 3318-0050  
Latam.support@hikvision.com

**Hikvision Turkey**  
T +90 (216)521 7070- 7074  
sales.tr@hikvision.com

**Hikvision Malaysia**  
T +601-7652-2413  
sales.my@hikvision.com

**Hikvision UK & Ireland**  
T +01628-902140  
sales.uk@hikvision.com

**Hikvision South Africa**  
Tel: +27 (10) 0351172  
sale.africa@hikvision.com

**Hikvision France**  
T +33(0)1-85-330-450  
info.fr@hikvision.com

**Hikvision Kazakhstan**  
T +7-727-9730667  
nikia.panfilov@hikvision.ru

**Hikvision Vietnam**  
T +84-974270888  
sales.vt@hikvision.com

**Hikvision UAE**  
T +971-4-4432090  
salesme@hikvision.com

**Hikvision Singapore**  
T +65-6684-4718  
sg@hikvision.com

**Hikvision Spain**  
T +34-91-737-16-55  
info.es@hikvision.com

**Hikvision Tashkent**  
T +99-87-1238-9438  
uzb@hikvision.ru

**Hikvision Hong Kong**  
T +852-2151-1761  
info.hk@hikvision.com

**Hikvision Russia**  
T +7-495-669-67-99  
saleru@hikvision.com

**Hikvision Korea**  
T +82-(0)31-731-8817  
sales.korea@hikvision.com

**Hikvision Poland**  
T +48-22-460-01-50  
info.pl@hikvision.com

**Hikvision Indonesia**  
T +62-21-2933759  
Sales.Indonesia@hikvision.com

**Hikvision Colombia**  
sales.colombia@hikvision.com