



FD9166-HN

Fixed Dome Network Camera

H.265 • 2MP • WDR Pro • 10M Invisible IR • Smart Stream III • PoE • Compact Design

- H.265 Compression Technology
- 30 fps @1920x1080
- WDR Pro for Unparalleled Visibility in High Contrast Environments
- Smart Stream III to Optimize Bandwidth Efficiency
- Built-in 940nm Invisible IR Illuminators up to 10 Meters
- Built-in 802.3af Compliant PoE
- Build-in MicroSD/SDHC/SDXC Card Slot for On-board Storage
- Video Rotation for Corridor Scenario
- Compact and Stylish Design



Technical Specifications

System Information

Model	FD9166-HN (2.8mm) FD9166-HN (3.6mm)
CPU	Multimedia SoC (System-on-Chip)
Flash	128 MB
RAM	256 MB

Camera Features

Image Sensor	1/2.9" Progressive CMOS
Max. Resolution	1920x1080 (2MP)
Lens Type	Fixed-focal
Focal Length	FD9166-HN (2.8mm): f = 2.8 mm FD9166-HN (3.6mm): f = 3.6 mm
Aperture	FD9166-HN (2.8mm): F1.8 FD9166-HN (3.6mm): F2.0
Auto-iris	Fixed iris
Field of View	FD9166-HN (2.8mm): 109° (Horizontal) 59° (Vertical) 129° (Diagonal) FD9166-HN (3.6mm): 89° (Horizontal) 47° (Vertical) 105° (Diagonal)
Shutter Time	1/5 sec. to 1/32,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut Filter	Yes
IR Illuminators	Built-in 940nm IR illuminators, effective up to 10 meters with Smart IR, IR LED*4
Minimum Illumination	FD9166-HN (2.8mm): 0.07 lux @ F1.8 (Color) 0.01 lux @ F1.8 (B/W) 0 lux with IR illumination on FD9166-HN (3.6mm): 0.16 lux @ F2.0 (Color) 0.01 lux @ F2.0 (B/W) 0 lux with IR illumination on
Pan Range	±30°
Tilt Range	90°
Rotation Range	±180°
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)
Storage	Seamless Recording to MicroSD/SDHC/SDXC card and recording to network-attached storage (NAS)

Video

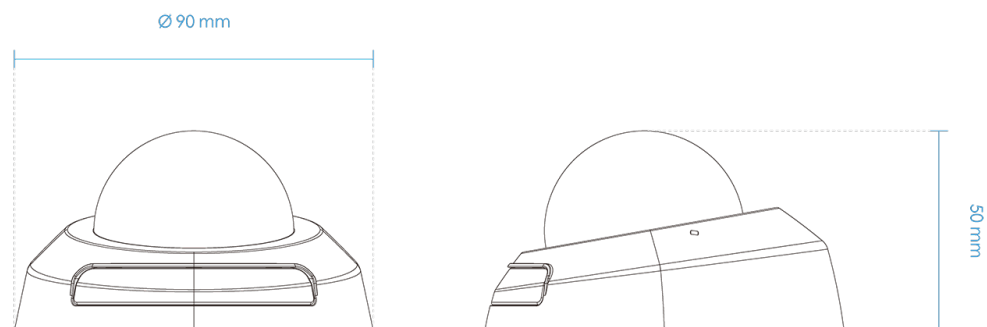
Video Compression	H.265, H264, MJPEG
Maximum Frame Rate	30 fps @ 1920x1080
Maximum Streams	3 video streams (Up to 8 configurable profiles)
S/N Ratio	FD9166-HN (2.8mm): 68 dB FD9166-HN (3.6mm.): 66 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constant bit rate control, Smart Stream III
Image Settings	General settings: video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings; Illuminators: illuminators, anti-overexposure; Image settings: white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR; Exposure: BLC, HLC, exposure control (exposure level, exposure time, gain control), AE speed adjustment, WDR; Privacy mask; Scheduled profile settings

Audio

Audio Capability	One-way Audio
Audio Compression	G.711, G.726

Audio Interface	Built-in microphone
Effective Range	5 meters
Network	
Users	Live viewing for up to 10 clients
Security	Access list, digest authentication, HTTPS, IEEE 802.1x, password protection, signed firmware, Trend Micro IoT Security (brute force attack event, cyberattack event, quarantine event), user access log, user account management
Protocols	802.1X, ARP, Bonjour, CIFS/SMB, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2, UDP, UPnP
Interface	10 Base-T/100 Base-TX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
ONVIF	Profile G, S, T supported, specification available at www.onvif.org
Solution Integration	
Video Motion Detection	Five-window video motion detection
VADP Package	Stratocast, Trend Micro IoT Security (1-year free trial), VIVOCLOUD
Alarm and Event	
Event Trigger	Audio detection, camera tampering detection, cybersecurity events (brute force attack event, cyberattack event, quarantine event), manual trigger, digital input, motion detection, periodical trigger, recording notification, SD card life expectancy, system boot
Event Action	Event notification via email, HTTP, FTP, NAS server, SD card, push notification File upload via email, HTTP, FTP, NAS server, SD card
General	
Connectors	RJ-45 cable connector for 10/100Mbps Network/PoE connection Digital input (30V, 1A)
LED Indicator	System power and status indicator
Power Input	IEEE 802.3af PoE Class 2
Power Consumption	Max. 5.5 W/2.8 W (IR on/off)
Dimensions	90 x 50 mm
Weight	150 g
Certifications	EMC: CE (EN 55032 Class B, EN 55024), FCC (FCC Part 15 Subpart B Class B), RCM (AS/NZS CISPR 32 Class B), VCCI (VCCI-CISPR 32 Class B); Safety: UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 62471); IA: BIS (IS 13252)
Operating Temperature	Starting Temperature: 0°C ~ 40°C(32°F~ 104°F) Working Temperature: -10°C ~ 55°C(14°F~ 131°F)(IR off) -10°C ~ 50°C(14°F~ 122°F)(IR on)
Humidity	90%
Warranty	36 months
System Requirements	
Operating System	Microsoft Windows 10/8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above Internet Explorer 11
Other Players	VLC: 1.1.11 or above
Included Accessories	
Others	Quick installation guide, screwdriver, alignment sticker, desiccant bag

Dimensions



Compatible Accessories

Mounting Kits



AM-21B
L-shape Bracket

Mounting Kits



AM-51E
Adapting Plate

Mounting Kits



AM-52B
Mounting Adapter