



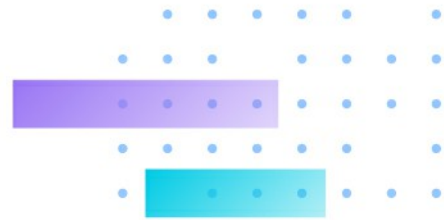
FE9391-EV-v2-M12

Fisheye Network Camera

12MP • Fisheye • WDR Pro • Invisible IR • Smart IR II • Smart Stream III • EN50155

- H.265 Compression Technology
- 30fps @ 2816x2816
- Smart Stream III to Optimize Bandwidth Efficiency
- WDR Pro
- Built-in Invisible IR Illuminators, Effective up to 5 Meters
- Smart IR II
- Weather-proof IP66/IP67-rated and Vandal-proof IK10-rated Housing
- Trend Micro IoT Security
- EN50155 OT4 Compliance for Professional Mobile Surveillance
- Wide Operating Temperature for Extreme Conditions (-40°C~70°C)





Technical Specifications

System Information

Model	FE9391-EV-v2-M12
CPU	Multimedia SoC (System-on-Chip)
Flash	8 GB
RAM	2 GB

Camera Features

Image Sensor	1/2.3" Progressive CMOS in 4056x3040
Max. Resolution	2816x2816
Lens Type	Fixed-focal
Focal Length	f = 1.18 mm
Aperture	F2.18
Iris Type	Fixed-iris
Field of View	180° ± 5° (Horizontal) 180° ± 5° (Vertical)
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 5 meters with Smart IR II, IR LED*4
Minimum Illumination	0.1 lux @ F2.18 (Color) < 0.005 lux @ F2.18 (B/W) 0 lux with IR illumination on
Pan/Tilt/Zoom Functionalities	ePTZ: 12x digital zoom (12x on IE plug-in)
Storage	Seamless Recording to MicroSD/SDHC/SDXC card and recording to network-attached storage (NAS)
Built-in Installation Aids	Pixel calculator

Video

Video Compression	H.265, H.264, MJPEG
Maximum Frame Rate	30fps @ 2816x2816 (WDR off) 20fps @ 2816x2816 (WDR on)
Maximum Streams	3 video streams (up to 8 configurable profiles)
S/N Ratio	56.9 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), day / night settings; anti-overexposure; Image settings: white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR; Exposure: BLC, exposure control, AE speed adjustment, WDR; Privacy mask; Scheduled profile settings; Pixel calculator
Display Mode	Client Dewarping Ceiling mounted: 1O Fisheye*, 1P Panoramic*, 2P Two Panoramics, 1R One Region*, 4R Four Regions, 1O3R One Fisheye Three Regions, 1O8R One Fisheye Eight Regions Wall mounted: 1O Fisheye*, 1P Panoramic*, 1R One Region*, 4R Four Regions, 1P2R One Panoramic Two Regions, 1P3R One Panoramic Three Regions, 1O3R, One Fisheye Three Regions * Available only by Plug-in free browser Local Dewarping Ceiling mounted: 1O Fisheye, 1P Panoramic, 2P Two Panoramics, 1R One Region, 4R Four Regions Wall mounted: 1O Fisheye, 1P Panoramic, 1R One Region, 4R Four Regions



Display Resolution	1O : 2816x2816, 2560x2560, 2048x2048, 1920x1920, 1536x1536, 1280x1280, 1024x1024, 768x768 Local Dewarp Mode 1P: 2816x704, 2560x640, 2048x512, 1920x480, 1536x384 2P: 2816x2816, 2560x2560, 2048x2048, 1920x1920, 1536x1536 1R: 1408x1408, 1280x1280, 1024x1024, 960x960, 768x768 4R: 2816x2816, 2560x2560, 2048x2048, 1920x1920, 1536x1536
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Audio

Audio Capability	Two-way Audio (full duplex) * * Requires optional cable
Audio Compression	G.711, G.726
Audio Interface	Built-in microphone External microphone input* External line output* *Requires optional cable
Effective Range	5 meters

Network

Users	Live viewing for up to 10 clients
Security	Access list, digest authentication, HTTPS, IEEE 802.1x, password protection, secure boot, 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 (M12, Female, 4pin D-coded)
ONVIF	Profile G, S, T supported, specification available at www.onvif.org

Solution Integration

Smart Motion Detection	Five-window video motion detection, people detection, time filter
Smart VCA	Smart VCA (Optional) Intrusion detection, loitering detection, line crossing detection, unattended object detection, missing object detection, crowd detection, running detection
VADP Package	Deep Learning VCA (Smart Motion Detection, Smart VCA*), Trend Micro IoT Security (3-year free trial) *Smart VCA (Optional)

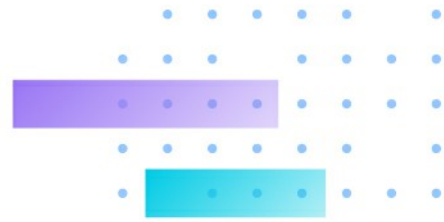
Alarm and Event

Event Trigger	Audio detection, camera tampering detection, cybersecurity events (brute force attack event, cyberattack event, quarantine event), digital input, manual trigger, motion detection, periodical trigger, recording notification, SD card life expectancy, shock detection, system boot
Event Action	Event notification via audio clip*, digital output, email, HTTP, FTP, NAS server, SD card File upload via email, HTTP, FTP, NAS server, SD card

General

Connectors	M12 4pin D-coded, Female connector for 10/100 Mbps PoE network connection Audio input* Audio output* DC 12V power input* Digital input* *Requires optional cable
LED Indicator	System power and status indicator
Power Input	IEEE 802.3at PoE Class 4
Power Consumption	Max. 18 W/9.55 W (IR on/off)
Dimensions	Ø 160 x 61.7 mm
Weight	916 g

Certifications	EMC: CE (EN 55032, EN 55035 Class A), FCC (FCC Part 15 Subpart B Class A), ICES-003 Issue 07, RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A), EMV06; Safety: UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471); Environment: IK10 (IEC 62262), IP66/IP67 (IEC 60529), NEMA (NEMA 250 Type 4X); Railway: EN 50155: 2017 (OT4/ST1) , EN 50121-3-2:2016+2019, EN 60068-2-1:2007, EN 60068-2-2:2007, EN 61373:2010, EN 45545-2, IEC 60571 Ed 3.0, IEC 62236-3-2 Ed 3.0, EN50121-4:2016; Vehicles: ECE R118, E-Mark (R10) E13 BI: BSMI (EMC: CNS 13438, Safety: CNS 14336-1)
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Operating Temperature	Starting Temperature: -40°C ~ 70°C (-40°F ~ 158°F) Working Temperature: -40°C ~ 70°C (-40°F ~ 158°F) (IR off) -40°C ~ 60°C (-40°F ~ 140°F) (IR on)
Humidity	98% RH (non-condensing)
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 10/11
Other Players	VLC: 1.1.11 or above

Included Accessories

Packing Contents	Quick installation guide, alignment sticker, screw pack, desiccant bag
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DORI (EN 62676-4 Standard)

Detect (25PPM/ 8PPF)	30.3 m (99.4 ft)
Observe (63PPM/ 19PPF)	12.0 m (39.4 ft)
Recognize (125PPM/ 38PPF)	6.1 m (20.0 ft)
Identify (250PPM/ 76PPF)	3.0 m (9.8 ft)

Dimensions

