



# FE9191



# FE9391-EV

## Fisheye Network Camera



H.265 • 12MP • 360° Panomorph View • PPTZ • 360° 20M IR •  
Smart IR II • IP66 • IK10 • EN50155

VIVOTEK's FE9191 and FE9391-EV are the next generation of market-leading 12-Megapixel 360° panomorph network cameras, both featuring a detailed 12-Megapixel CMOS sensor which guarantees superb image quality. Utilizing the latest in panomorph lens technology for 180° panoramic view (wall mount) or 360° surround view (ceiling/wall/floor mount) with zero blind spots, these cameras are able to provide comprehensive coverage of open areas such as airports, shopping malls, parking lots, retail stores, offices and more.

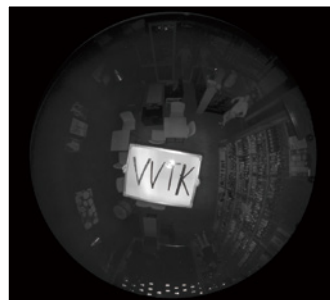
The FE9191 and FE9391-EV (IP66, IK10 rated) are the successors to FE8191 and FE8391-V in the VIVOTEK 360° surround view family. Both new models are equipped with a removable IR-cut filter and WDR Enhancement technology, allowing the cameras to maintain optimal image quality around the clock for unparalleled visibility under high-contrast lighting environments. 3D Noise Reduction technology enables the cameras to capture clear, polished video under low-light conditions. The FE9191 and

FE9391-EV's use of the latest in panomorph lens technology has led to much improved image quality with a huge drop in edge distortion. The FE9391-EV is also updated with the latest in IR illumination, VIVOTEK's Smart IR II technology with Adaptive IR. Adaptive IR enables the FE9391-EV's IR illuminators to adjust to the scene together or individually to provide the best possible IR image, reducing glaring hotspots and/or underexposed dark spots.

The FE9191 and FE9391-EV will also be the first to include a new wave of advanced Video Content Analyses (VCA). Available in 4Q 2017, these will include better object detection in order to reduce false alarms. Through advanced Video Content Analyses functions including crowd detection features the FE9191 and FE9391-EV are the next steps in elevating surveillance cameras from image capturing devices to advanced notification instruments, allowing users to see more in smarter ways.

## Key Features

- 12-Megapixel CMOS Sensor
- Real-time H.265, H.264 and MJPEG Compression (Triple Codec)
- 20 fps @ 2816x2816
- 1.29 mm Panomorph Lens for 180° Panoramic View and 360° Surround View
- Removable IR-cut Filter for Day & Night Function
- 360° 20M IR with Smart IR II (FE9391-EV)
- WDR Enhancement for Improved Visibility in Extremely Bright and Dark Environments
- 3D Noise Reduction for Low-light Conditions
- ePTZ for Data Efficiency
- Support Client Side Dewarping
- Pixel Calculator for Image Clarity Measurement
- 802.3at PoE Compliant
- Vandal-proof IK10-rated and Weather-proof IP66-rated Housing (FE9391-EV)
- Built-in MicroSD/SDHC/SDXC Card Slot for On-board Storage



With Smart IR



With Smart IR II (FE9391-EV)

## Technical Specifications

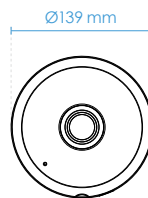
Model	FE9191: 12MP 360° Panomorph Camera FE9391-EV: 12MP 360° Panomorph Camera, 360° 20M IR, IP66, IK10, EN50155	Interface	Built-in microphone External microphone input External line output
<b>System Information</b>		Effective Range	5 meters
CPU	Multimedia SoC (System-on-Chip)	<b>Network</b>	
Flash	256MB	Users	Live viewing for up to 10 clients
RAM	1GB	Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/ RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X, SSL/TLS, ARP, NTCIP, CIFS/SMB
<b>Camera Features</b>		Interface	10 Base-T/100 BaseTX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
Image Sensor	1/1.7" Progressive CMOS in 4000x3000	ONVIF	Supported, specification available at <a href="http://www.onvif.org">www.onvif.org</a>
Maximum Resolution	2816x2816	<b>Intelligent Video</b>	
Lens Type	Fixed-focal	Video Motion Detection	Five-window video motion detection
Focal Length	f = 1.29 mm	<b>Alarm and Event</b>	
Aperture	F2.2	Alarm Triggers	Motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection, audio detection
Field of View	180° (horizontal) 180° (vertical) 180° (diagonal)	Alarm Events	Event notification using digital output, HTTP, SMTP, FTP, NAS server and MicroSD card File upload via HTTP, SMTP, FTP, NAS server and MicroSD card
Shutter Time	1/5 sec. to 1/32,000 sec.	<b>General</b>	
WDR Technology	WDR Enhanced	Connectors	RJ-45 for Network/PoE connection Audio input *1 Audio output *1 DC 12V Power input Digital input *1 Digital output *1
Day/Night	Removable IR-cut filter for day & night function	LED Indicator	System power and status indicator
Minimum Illumination	0.18 Lux @ F2.2 (Color) <0.001 Lux @ F2.2 (B/W)	Power Input	FE9191: DC12V, PoE 802.3af Class 2 FE9391-EV: DC12V, PoE 802.3af Class 4
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)	Power Consumption	FE9191: Max. 6.49 W FE9391-EV: Max. 25 W
IR Illuminators	FE9391-EV: Built-in IR illuminators, effective up to 20 meters with Smart IR II	Dimensions	FE9191: Ø 139 x 39 mm FE9391-EV: Ø 160 x 61.7 mm
On-board Storage	Slot type: MicroSD/SDHC/SDXC card slot Seamless Recording	Weight	FE9191: 345 g FE9391-EV: 846 g
<b>Video</b>		Casing	FE9391-EV: IP66, IK10
Compression	H.265, H.264, MJPEG	Safety Certifications	FE9191: CE, LVD, VCCI, C-Tick, UL, FCC Class B FE9391-EV: CE, LVD, VCCI, C-Tick, UL, FCC Class A, EN50155
Maximum Frame Rate	20 fps @ 2816x2816	Operating Temperature	FE9191: Starting Temperature: 0°C ~ 50°C (32°F ~ 122°F) Working Temperature: -10°C ~ 50°C (14°F ~ 122°F) FE9391-EV: Starting Temperature: -25°C ~ 50°C (-13°F ~ 122°F) Working Temperature: -40°C ~ 50°C (-40°F ~ 122°F)
Maximum Streams	4 Simultaneous Streams	Humidity	90%
S/N Ratio	42.9 dB	<b>Audio</b>	
Dynamic Range	61.8 dB	Audio Capability	Two-way audio (full duplex)
Video Streaming	Adjustable resolution, quality and bitrate, configurable video cropping for bandwidth saving, Smart Stream II	Compression	G.711, G.726
Image Settings	Adjustable image size, quality and bit rate, time stamp, text overlay, flip & mirror, scheduled profile settings, configurable brightness/contrast/saturation/sharpness, pixel calculator, 3D-Noise reduction, white balance, exposure control, gain, backlight compensation, privacy masks, defog, pixel calculator		

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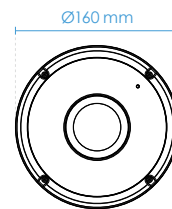
Warranty	36 months
<b>System Requirements</b>	
Operating System	Microsoft Windows 8/7
Web Browser	Internet Explorer 10/11
Other Players	VLC; 1.1.11 or above Quicktime: 7 or above
<b>Included Accessories</b>	
Others	Quick installation guide, warranty card, alignment sticker, desiccant bag, screw driver, screws pack, mounting bracket, I/O cable (Cable not included in North America)

## Dimensions

• FE9191







• FE9391-EV



## Compatible Accessories

### Mounting Kits

 <p>AM-520 Dome adapter</p>	 <p>AM-116/AM-117 Pendant pipe (20cm/40cm)</p>	 <p>AM-114/AM-118 Pendant head</p>	 <p>AM-514 Adapter ring (for FE9191)</p>
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