

## Technical Specifications

System Information		Alarm and Event	
CPU	Multimedia SoC (System-on-Chip)	Alarm Triggers	Video motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection
Flash	128 MB	Alarm Events	Event notification using digital output, HTTP, SMTP, FTP and NAS server File upload via HTTP, SMTP, FTP and NAS server
RAM	256 MB		
Camera Features		General	
Image Sensor	1/2.5" Progressive CMOS sensor	Connectors	RJ-45 cable connector for Network/PoE connection Audio input Audio output DC 12V power input Digital input*1 Digital output*1
Maximum Resolution	1536x1536	LED Indicator	System power and status indicator
Lens Type	Fixed-focal	Power Input	DC 12V IEEE 802.3af PoE Class 2
Focal Length	f = 1.19 mm	Power Consumption	Max. 5.1 W (DC 12V) Max. 5.3 W (PoE)
Aperture	F2.0	Dimensions	Ø: 139 mm x 43 mm
Field of View	180° (horizontal) 180° (vertical) 180° (diagonal)	Weight	Net: 353 g
Shutter Time	1/5 sec. to 1/32,000 sec.	Safety Certifications	CE, LVD, FCC Class A, VCCI, C-Tick, UL
WDR Technology	WDR Enhanced	Operating Temperature	-25°C ~ 50°C (-13°F ~ 122°F)
Day/Night	Removable IR-cut filter for day & night function	Warranty	36 months
Minimum Illumination	0.2 Lux @ F2.0 (Color) 0.001 Lux @ F2.0 (B/W)	System Requirements	
Pan/tilt/zoom Functionalities	ePTZ: 12x digital zoom (12x on IE plug-in)	Operating System	Microsoft Windows 7/Vista/XP/2000
On-board Storage	MicroSD/SDHC/SDXC card slot	Web Browser	Mozilla Firefox 7~10 (Streaming only) Internet Explorer 7.x or 8.x
Video		Other Players	VLC: 1.1.11 or above Quicktime: 7 or above
Compression	H.264, MJPEG & MPEG-4	Included Accessories	
Maximum Frame Rate	H.264: 15 fps at 1536x1536 MPEG-4: 15 fps at 1536x1536 MJPEG: 15 fps at 1536x1536	CD	User's manual, quick installation guide, Installation Wizard 2, ST7501 32-channel recording software
Maximum Streams	3 simultaneous streams	Others	Quick installation guide, warranty card, alignment sticker, screws pack, I/O cable, software CD
S/N Ratio	Above 62 dB	Dimensions	
Dynamic Range	57 dB		
Video Streaming Image Settings	Adjustable resolution, quality and bitrate Adjustable image size, quality and bit rate Pixel Calculator Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks Scheduled profile settings		
Audio			
Audio Capability	Audio input/output (full duplex)		
Compression	GSM-AMR, AAC, G.711		
Interface	Built-in microphone External microphone input		
Effective Range	5 meters		
Network			
Users	Live viewing for up to 10 clients		
Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X		
Interface	10Base-T/100 BaseTX Ethernet (RJ-45)		
ONVIF	Supported, specification available at www.onvif.org		
Intelligent Video			
Video Motion Detection	Five-window video motion detection		

## Compatible Accessories

### Mounting Kits



**AM-518**  
Dome adapter



**AM-114**  
Pendant head



**AM-515**  
NPT adapter (for AM-518)



**AM-115**  
Pendant pipe

### Power Adapter



**AA-221**  
DC 12V power adapter

### PoE Kits



**POE-IJ-1748NDN**  
PoE injector, 802.3af compliant

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Ver 1.0



# Fisheye Network Camera FE8173



3MP • 360° Surround View • Pixel Calculator

VIVOTEK FE8173 is the latest fisheye fixed dome network camera from VIVOTEK, featuring a detailed 3-Megapixel resolution sensor with superb image quality. Equipped with a fisheye lens for 180° panoramic view (wall mount) or 360° surround view (ceiling/floor/table mount) without blind spots, the camera is able to provide coverage of wide, open indoor areas, such as airports, shopping malls, train stations, retail stores, offices and more.

The FE8173 offers various display layouts, including original surround view, panoramic view, and regional view for various mounting applications. With the latest cutting-edge image processing capabilities, hemispherical images captured from the fisheye camera can be converted into conventional rectilinear projection for viewing and analysis. In addition, in both the panoramic as well as regional viewing modes, users can utilize the ultra-smooth ePTZ function to easily zoom in and focus on a region of interest (ROI). The new cutting-edge pixel calculator function helps the user to ensure the image quality of a desired area.

As with all VIVOTEK true day/night cameras, the FE8173 features a removable IR-cut filter, maintaining clear images 24 hours a day. Together with 802.3af compliant PoE, MicroSD/SDHC/SDXC card slot for on-board storage, and iViewer app support, the FE8173 is indisputably the top choice for constructing a robust surveillance system with the greatest coverage possible.

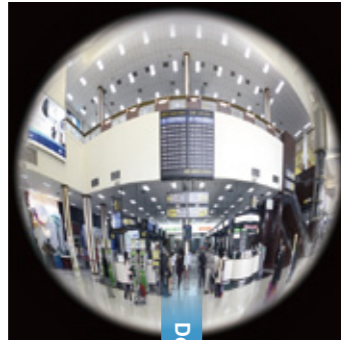
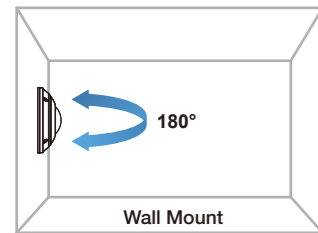
**SUPREME**

## Comprehensive Overview without Blind Spots

With a wide-angle field of view, the FE8173 is able to capture 180° panoramic or 360° surround views without blind spots, effectively reducing the need for other cameras as well as physical maintenance.

### • 180° Panoramic View

The FE8173 can provide an overview of the region from wall to wall.



## Image Capture with Greater Data Efficiency

### • Flexible Display Mode

The overview image captured by the FE8173 can be tailored in various ways according to specific applications. The FE8173 offers multiple types of display layouts in the web browser interface, including 1O, 1O3R, 1O8R, 1P, 2P, 1P2R, 1P3R, 1R, 4R and 4R PRO.

The following diagrams show several of the display modes:



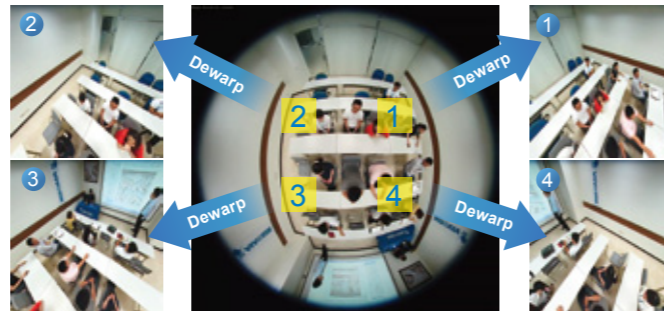
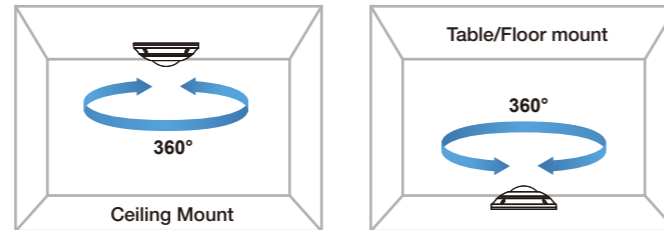
1O

1O3R – provide details of three 720p cameras

1O8R – provide details of eight VGA cameras

### • 360° Surround View

When mounted on the ceiling, the FE8173 can monitor all four corners of a room. Any moving object in the room will be captured at all times. The viewer would be able to keep a track of suspicious objects without missing critical information.



### Dewarp

Optical distortion is unavoidable for ultra wide-angle and fisheye lenses. The hemispherical images captured from the fisheye camera are convex, especially the image borders; however, software allows the image to be dewarped and remapped into conventional rectilinear projection using an integrated plug-in for specific viewing and analysis.



1P

• O – Original Surround View  
 • P – Panoramic View  
 • R – Regional View

The "1O" refers to the original image without processing. For legal purposes, keeping the raw data can be very important and necessary for forensic experts to conduct analysis during the examination process.

### • Pixel Calculator

The pixel calculator helps the installer to easily ensure that the camera installation fulfills the pixel resolution required in an application. By using the tool to draw up to 3 windows on the video screen around the areas of interest, the installer can properly place and adjust the camera view to capture the detail required.



### • ePTZ

The FE8173 provides electronic pan/tilt/zoom functions, allowing users to move to a target region in the viewing window without a mechanical movement. In a "panoramic view" and a "regional view", users can utilize the ultra-smooth ePTZ function to easily focus on a region of interest (ROI) using the mouse wheel. Compared to the conventional mechanical PTZ, the ePTZ feature offers zero-wait operation through client-side control. In addition, with a high-end dewarping algorithm (plug-in), the ePTZ on the FE8173 responds swiftly and seamlessly to user's control.

In 4R PRO mode, the four viewing windows will rotate synchronously while clicking or dragging one of the windows.



ePTZ in 1O3R Mode

## Clear Images 24/7

The FE8173 delivers day & night functionality with a built-in removable IR-cut filter. By day, the IR-cut filter screens out infrared light to reduce color distortion. At night, the filter is removed to accept infrared light for higher lighting efficiency.



Day

Night

## FE8173 | Fisheye Network Camera

- 15 fps @ 1536x1536
- 1.19 mm Fisheye Lens for 180° Panoramic View and 360° Surround View
- Removable IR-cut Filter for Day & Night Function
- Real-time H.264, MPEG-4, and MJPEG Compression (Triple Codec)
- WDR Enhancement for Unparalleled Visibility in Extremely Bright or Dark Environments
- ePTZ for Data Efficiency
- Built-in 802.3af Compliant PoE
- Built-in MicroSD/SDHC/SDXC Card Slot for On-board Storage
- Pixel Calculator for Image Clarity Measurement

