

## 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
RAM	256 MB		File upload via HTTP, SMTP, FTP and NAS server
Camera Features		General	
Image Sensor	1/2.5" Progressive CMOS sensor	Connectors	RJ-45 cable connector for Network/PoE connection
Maximum Resolution	1536x1536	Audio input	Audio input
Lens Type	Fixed-focal	Audio output	Audio output
Focal Length	f = 1.19 mm	DC 12V power input	DC 12V power input
Aperture	F2.0	Digital input*1	Digital input*1
Field of View	180° (horizontal) 180° (vertical) 180° (diagonal)	Digital output*1	Digital output*1
Shutter Time	1/5 sec. to 1/32,000 sec.	LED Indicator	System power and status indicator
WDR Technology	WDR Enhanced	Power Input	DC 12V IEEE 802.3af PoE Class 2
Day/Night	Removable IR-cut filter for day & night function	Power Consumption	Max. 5.1 W (DC 12V) Max. 5.3 W (PoE)
Minimum Illumination	0.2 Lux @ F2.0 (Color) 0.001 Lux @ F2.0 (B/W)	Dimensions	Ø: 139 mm x 43 mm
Pan/tilt/zoom Functionalities	ePTZ: 12x digital zoom (12x on IE plug-in)	Weight	Net: 353 g
On-board Storage	MicroSD/SDHC/SDXC card slot	Safety Certifications	CE, LVD, FCC Class A, VCCI, C-Tick, UL
Video		Operating Temperature	-25°C ~ 50°C (-13°F ~ 122°F)
Compression	H.264, MJPEG & MPEG-4	Warranty	36 months
Maximum Frame Rate	H.264: 15 fps at 1536x1536 MPEG-4: 15 fps at 1536x1536 MJPEG: 15 fps at 1536x1536	System Requirements	
Maximum Streams	3 simultaneous streams	Operating System	Microsoft Windows 7/Vista/XP/2000
S/N Ratio	Above 62 dB	Web Browser	Mozilla Firefox 7~10 (Streaming only) Internet Explorer 7.x or 8.x
Dynamic Range	57 dB	Other Players	VLC: 1.1.11 or above Quicktime: 7 or above
Video Streaming	Adjustable resolution, quality and bitrate	Included Accessories	
Image Settings	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	CD	User's manual, quick installation guide, Installation Wizard 2, ST7501 32-channel recording software
Audio		Others	Quick installation guide, warranty card, alignment sticker, screws pack, I/O cable, software CD
Audio Capability	Audio input/output (full duplex)	Dimensions	
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

All specifications are subject to change without notice. Copyright © 2013 VIVOTEK INC. All rights reserved.

Distributed by:



VIVOTEK INC.  
6F, No. 192, Lien-Cheng Rd., Chung-Ho, New Taipei City, 235, Taiwan, R.O.C.  
| T: +886-2-82455282 | F: +886-2-82455532 | E: sales@vivotek.com

VIVOTEK USA, INC.  
2050 Ringwood Avenue, San Jose, CA 95131  
| T: 408-773-8686 | F: 408-773-8298 | E: salesusa@vivotek.com

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.

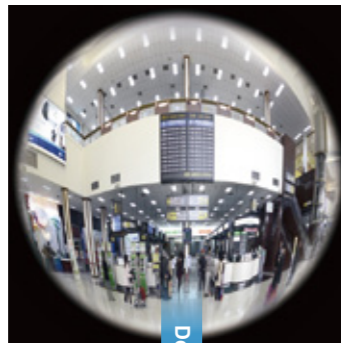
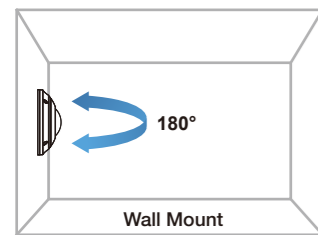
**SUPREME**

## 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.

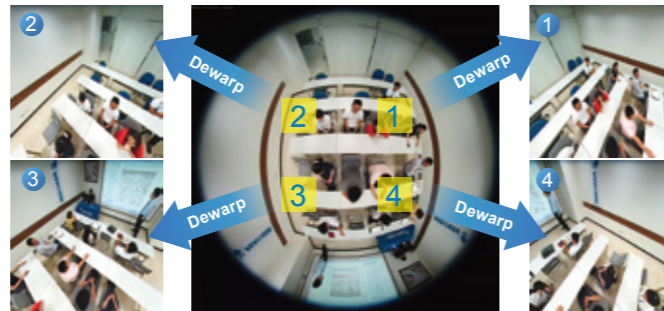
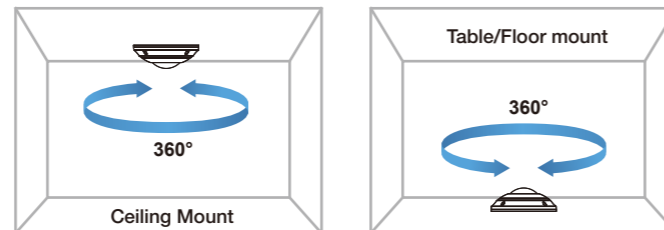
### • 180° Panoramic View

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



### • 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

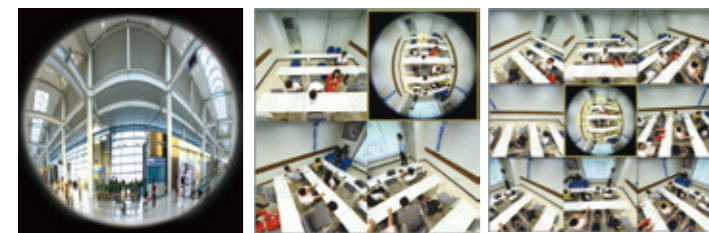
Optical distortion is unavoidable for ultra wide-angle and fisheye lenses. The hemispherical images captured from the fisheye camera are convex, especially the image borders; however, software allows the image to be dewarped and remapped into conventional rectilinear projection using an integrated plug-in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

## 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



1P

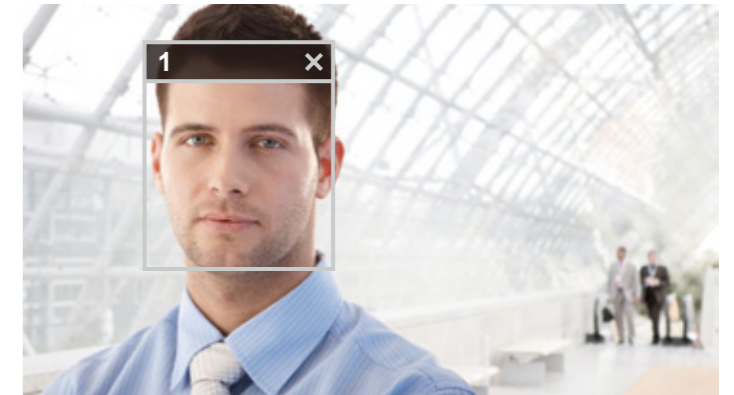
• **O – Original Surround View** The "1O" refers to the original image without processing. For legal purposes, keeping the raw data can be very important and necessary for forensic experts to conduct analysis during the examination process.

• **P – Panoramic View**

• **R – Regional View**

### • 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

