Technical Specifications

System Information

CPU	Multimedia SoC (System-on-Chip)
Flash	128 MB
RAM	256 MB

Camera Features

Image Sensor	1/2.5" Progressive CMOS sensor in 2560 x 1920 resolution
Lens Type	Fixed-focal
Focal Length	f = 1.05 mm
Aperture	F2.8
Field of View	180° (horizontal) 180° (vertical) 180° (diagonal)
Shutter Time	1/5 sec. to 1/32,000 sec.
WDR Technology	WDR Enhanced
Day/Night	Removable IR-cut filter for day & night function
Minimum Illumination	0.03 Lux @ F2.8, 50 IRE (Color) 0.001 Lux @ F2.8, 50 IRE (B/W)
Pan/tilt/zoom Functionalities	ePTZ: 12x digital zoom (12x on IE plug-in)
On-board Storage	MicroSD/SDHC/SDXC card slot

Video

Compression	H.264, MJPEG & MPEG-4
Maximum Frame Rate	H.264: 15 fps at 1920x1920 30 fps at 1920x1080 MPEG-4: 15 fps at 1920x1920 30 fps at 1920x1080 MJPEG: 15 fps at 1920x1920 30 fps at 1920x1080
Maximum Streams	3 simultaneous streams
S/N Ratio	Above 62 dB
Dynamic Range	Above 57 dB
Video Streaming	Adjustable resolution, quality and bitrate
Image Settings	Adjustable image size, quality and bit rate Pixel counter 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	Ver. 1.02

Intelligent Video

Video Motion Detection	Five-window video motion detection

Alarm and Event

Alarm Triggers	Video motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection
Alarm Events	Event notification using digital output, HTTP, SMTP, FTP and NAS server File upload via HTTP, SMTP, FTP and NAS server

General

Connectors	RJ-45 cable connector for Network/PoE connection Audio input Audio output DC 12V power inout Digital input*1 Digital output*1
LED Indicator	System power and status indicator
Power Input	DC 12V IEEE 802.3af PoE Class 2
Power Consumption	Max. 5.1 W (DC 12V) Max. 5.3 W (PoE)
Dimensions	Ø: 145 mm x 52 mm (FE8172V) Ø: 139 mm x 37 mm (FE8172)
Weight	Net: 545 g (FE8172V) Net: 358 g (FE8172)
Casing	Vandal-proof IK10-rated metal housing (FE8172V) Weather-proof IP66-rated housing (FE8172V)
Safety Certifications	CE, LVD, FCC Class A, VCCI, C-Tick, UL, EN50155 (FE8172V)
Operating Temperature	Starting Temperature: -25°C ~ 50°C (-13°F ~ 122°F) Working Temperature: -40°C ~ 50°C (-40°F ~ 122°F)
Warranty	36 months

System Requirements

Operating System	Microsoft Windows 7/Vista/XP/2000
Web Browser	Mozilla Firefox 7~10 (Streaming only) Internet Explorer 7.x or 8.x
Other Players	VLC: 1.1.11 or above Quicktime: 7 or above

Included Accessories

CD	User's manual, quick installation guide, Installation Wizard 2, ST7501 32-channel recording software
Others	Quick installation guide, warranty card, alignment sticker, desiccant bag, screw driver, screws pack, I/O cable, mounting bracket, software CD

Dimensions

• FE8172V   • FE8172

Ø145 mm   Ø139 mm

52 mm   37 mm

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

Distributed by:

Ver 1.0

Fisheye
Network Camera
FE8172/72V

5MP • 360° Surround View •
180° Panoramic View

VIVOTEK FE8172/72V is the latest fisheye fixed dome network camera, featuring a detailed 5-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 areas, such as airports, shopping malls, parking lots, retail stores, offices and more.

The FE8172/72V offers various display layouts, including original surround view, panoramic view, and regional view for various mounting applications. With the 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 pixel calculator function helps the user to ensure the image quality of a desired area.

As with all VIVOTEK true day/night cameras, the FE8172/72V features a removable IR-cut filter, maintaining clear images 24 hours a day. FE8172V's IP66-rated housing is designed to help the camera body withstand rain and dust and ensure operation under a multitude of harsh weather conditions; additionally, the vandal-proof IK10-rated housing effectively provides robust protection from vandalism. Together with 802.3af compliant PoE, MicroSD/SDHC/SDXC card slot for on-board storage, EN50155 (FE8172V only) and iPad applications, the FE8172/72V is indisputably the top choice for constructing a robust surveillance system with the greatest coverage possible.
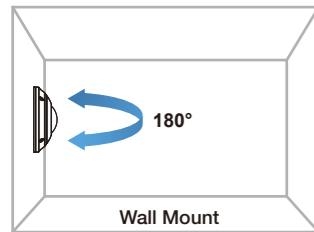
SUPREME

Comprehensive Overview without Blind Spots

With a wide-angle field of view, the FE8172/72V are able to capture 180° panoramic or 360° surround views without blind spots, effectively reducing the need for other cameras as well as physical maintenance.
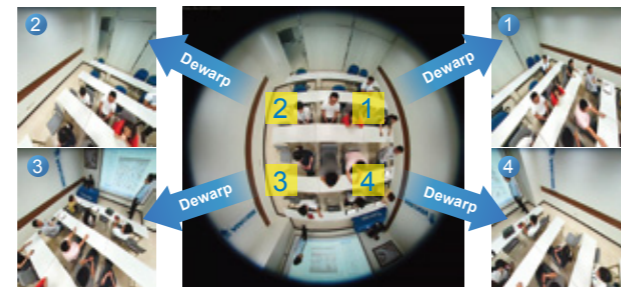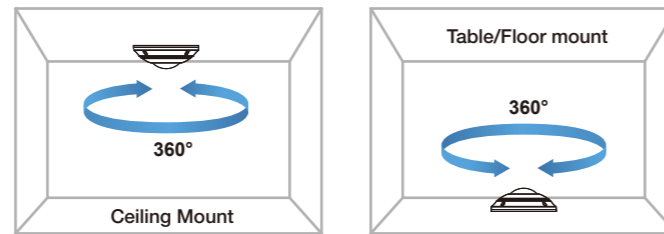
• 180° Panoramic View

The FE8172/72V can provide an overview of the region from wall to wall.

• 360° Surround View

When mounted on the ceiling, the FE8172/72V 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 FE8172/72V can be tailored in various ways according to specific applications. The FE8172/72V offer 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**
- **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 FE8172/72V provide 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 FE8172/72V respond 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 FE8172/72V deliver 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

Reliability in Demanding Environments (FE8172V Only)

• Vandal-proof IK10-rated Housing

Equipped with a protective housing, the FE8172V is protected from vandalism, making it suitable for high-risk environments. The metal base and polycarbonate cover enable the FE8172V to withstand high impacts, thereby ensuring functional operation at all times.

• EN50155 Compliance

With resistance to an extended working temperature range of -40°C to 50°C, the FE8172V is compliant with the EN50155 standard for electronic equipments operating in railway vehicles. It also meets the EN50155's shock and vibration requirements to provide high reliability and rugged performance during movement.

• IP66-rated Housing

The weather-proof IP66-rated housing provides protection from dust and water, allowing the FE8172V to operate in the outdoor setting under a multitude of weather conditions.

FE8172/72V | Fisheye Network Camera

- 5-Megapixel CMOS Sensor
- 30 fps @ 1080p Full HD
- 1.05 mm Fisheye Lens for 180° Panoramic View and 360° Surround View
- Removable IR-cut Filter for Day & Night Function
- EN50155 Compliance for Professional Mobile Surveillance (FE8172V)
- Real-time H.264, MPEG-4, and MJPEG Compression (Triple Codec)
- WDR Enhancement for Unparalleled Visibility in Extremely Bright or Dark Environments
- Vandal-proof IK10-rated and Weather-proof IP66-rated Housing (FE8172V)
- 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

• FE8172

• FE8172V