## Technical Specifications

### System
- CPU: TI DM365 SoC
- Flash: 128MB
- RAM: 256MB
- Embedded OS: Linux 2.6

### Lens
- Board lens, Var-focal; f = 3 – 9 mm, F1.2 (wide), F2.1 (tele), auto-iris
- Removable IR-cut filter for day & night function

### Angle of View
- 31.7° ~ 90.0° (horizontal)
- 23.8° ~ 88.4° (vertical)

### Shutter Time
- 1/5 sec. to 140,000 sec.

### Minimum Illumination
- 0 Lux / F1.2 (IR LED on)
- 1/3’’ CMOS sensor in 1900x1200 resolution
- Built-in IR illuminators, effective up to 20 meters

### IR Illuminators
- Built-in IR illuminators

### Video
- Compression: H.264, MJPEG & MPEG-4
- Streaming: Simultaneous multiple streams
- H.264 streaming over UDP, TCP, HTTP, or HTTPS
- MPEG-4 streaming over UDP, TCP, HTTP, or HTTPS
- MJPEG streaming over HTTP or HTTPS
- Supports activity adaptive streaming for dynamic frame rate control
- Supports video cropping for bandwidth efficiency
- Supports ePTZ for data efficiency
- Supports 3GP mobile surveillance
- Frame rates:
  - H.264: up to 30 fps at 1280x720
  - up to 15 fps at 1920x1200
  - up to 15 fps at 1500x1200
  - MJPEG: up to 30 fps at 1920x1200
  - up to 15 fps at 1500x1200
- Interface:
  - BNC connector for video output
  - NTSC/PAL video output switch

### Image Settings
- Adjustable image size, quality, and bit rate
- Time stamp and text caption overlay
- Flip & mirror
- Configurable brightness, contrast, saturation, white balance, and exposure
- AGC, AWB, AES
- Automatic, manual, or scheduled day/night mode
- BLC (Backlight Compensation)
- Supports privacy masks

### Audio
- Compression: G.711 audio encoding, bit rate: 64 kbps, μ-Law or A-Law mode
- GSM-AMR speech encoding, bit rate: 4.75 kbps to 12.2 kbps
- Supports activity adaptive streaming
- Supports video cropping for bandwidth efficiency
- Supports activity adaptive streaming
- Supports privacy masks

### Streaming
- Compression: H.264, MJPEG & MPEG-4
- Interface:
  - IP address filtering
  - Multi-level user access with password protection
  - 802.1X port-based authentication for network protection

### Security
- Multi-level user access with password protection
- IP address filtering
- HTTPS encrypted data transmission
- 802.1X port-based authentication for network protection

### Users
- Live viewing for up to 10 clients

### Dimension
- Ø 170 mm x 133 mm

### Weight
- Net: 2.184 g

### LED Indicator
- System restore status indicator
- Power on status indicator

### Power
- 12V DC
- 24V AC
- Power consumption: Max. 5.3W
- Max. 50W (with heater, fan, and IR illuminator)
- 802.3af compliant Power-over-Ethernet

### Housing
- Metal base and polycarbonate transparent cover
- Weather-proof IP66-rated housing
- vandal-proof: 1,000 kg
- Weather-proof IP56-rated housing

### Approvals
- CE, EVD, FCC, VCCI, C-Tick

### Viewing System Requirements
- OS: Microsoft Windows 7/Vista/XP or above
- Browser: Mozilla Firefox, Internet Explorer 7.x or above
- Quick Time: 6.5 or above
- Real Player: 10.5 or above
- OS: Microsoft Windows 7/Vista/XP

### Humidity
- 20 ~ 95% RH

### Temperature
- -30 ~ 50 °C (-22 ~ 122 °F)

### Operating Environments
- Operating temperature: -30 ~ 50 °C (-22 ~ 122 °F)
- Humidity: 20 ~ 95% RH

### Applications
- Supports firmware upgrade
- 32-CH ST7501 recording software
- Supports activity adaptive streaming for dynamic frame rate control
- Supports video streaming over HTTP or HTTPS
- Supports MJPEG streaming over HTTP or HTTPS
- Supports H.264 streaming over UDP, TCP, HTTP, or HTTPS
- Supports MJPEG streaming over HTTP or HTTPS

### Warranty
- 24 months

### Network
- 10/100 Mbps Ethernet, RJ-45
- ONVIF support

VIVOTEK’s FD8361 is the latest professional-series outdoor fixed dome network camera featuring superb megapixel image quality and exceptional bandwidth efficiency. With day & night functionality and a weatherproof housing, it is especially suitable for tough outdoor surveillance environments such as parking lots and streets.

Featuring a 2-megapixel sensor, the FD8361 is able to provide extremely wide coverage with the finest details. Additionally, the camera is incorporated with high performance H.264 compression technology, and has adopted a number of innovative bandwidth-efficient technologies built into the camera, including cropping, ePTZ, and activity adaptive streaming.

In order to adapt to constantly changing outdoor lighting conditions, the FD8361 features an auto-iris lens to perform better image quality under different lighting environment. The camera also comes with a removable IR-cut filter and IR illuminators for superior image quality around the clock. For protection against the elements, the camera is furnished with an IP66-rated housing and vandal-proof casing to withstand rain, dust, and vandalism. The PoE-powered heater and fan further enhance the FD8361’s performance and reliability in extremely cold and warm weather.

The integrated BNC connector allowing the FD8361 to be connected directly to an analog monitor provides enhanced flexibility and usability and ease of installation. Other advanced features include a 3-axis mechanism for flexible installation, 802.3af PoE, SD/SDHC card slot, tamper detection, and SIP-enabled two-way audio. With the included ST7501 32-CH central management software, the FD8361 is the ultimate camera for demanding outdoor environments.
Flawless Image Quality & Data Efficiency

The FD8361 is equipped with a 2-megapixel sensor, making it capable of providing highly detailed images by which users can easily and accurately identify minute objects such as vehicle license plates or facial features.

To take full advantage of the high resolution capabilities, the FD8361 is incorporated with several innovative bandwidth-saving technologies. Cropping allows for the removal of unnecessary information and transmits only the image of a selected region. ePTZ can zoom in on a target area without changing the camera direction physically, then deliver only the image of that region via the Multiple Streams feature for optimal bandwidth allocation. Activity Adaptive Streaming allocates bandwidth usage dynamically with a configurable frame rate to optimize bandwidth consumption for different situations.

Ultimate Outdoor Surveillance

The FD8361’s weather-proof IP66-rated housing provides protection from extreme weather conditions, dust, and moisture. It offers total protection against contamination and withstands water jet ingress, allowing for operation in demanding environments.

Extended Temperature Range

With a heater and fan incorporated in the housing, the FD8361 can operate in extreme temperatures ranging from -30 to 50 °C and humidity from 20 to 95% RH.

Protection against Tampering and Vandalism

The ability to detect camera tampering attempts and send out real time alerts makes the FD8361 an invaluable solution for vandalism-prone areas. Additionally, the vandal-proof housing consisting of a metal base and polycarbonate cover enables the camera to withstand an impact of up to 1,000 kg, making it suitable for high-risk environments.

Constant, Uninterrupted Surveillance

Clear Images 24/7

The FD8361 delivers day & night functionality with a built-in removable IR-cut filter and IR illuminators effective up to 20 meters. By day, the IR-cut filter screens out infrared light to reduce color distortion, and at night, the filter is removed to accept infrared light and the IR illuminators are activated for higher light efficiency.

SD/SDHC Card

The FD8361 features an SD/SDHC card slot to provide short-term and portable video storage on removable memory cards, thereby providing a higher level of convenience. With this feature, because camera images are continuously recorded on the SD/SDHC card, the chance of data loss due to network disconnection is greatly reduced.

H.264

H.264 is the latest high performance video compression standard that boasts a much higher compression ratio than MJPEG or MPEG-4. With a 90% reduction in file size, a 2MB image can be drastically reduced to 20KB with H.264. As such, uncompromised image quality and less required bandwidth and storage space make H.264 ideal for megapixel cameras.

Product Features

- 2-megapixel CMOS Sensor
- 3 - 9 mm Vari-focal, Auto-iris Lens
- Removable IR-cut Filter for Day and Night Function
- Built-in IR Illuminators, Effective up to 20 Meters
- Real-time H.264, MPEG-4 and MJPEG Compression (Triple Codec)
- Simultaneous Multiple Streams
- Video Cropping for Bandwidth Saving
- ePTZ for Data Efficiency
- Activity Adaptive Streaming for Dynamic Frame Rate Control
- Tamper Detection for Unauthorized Changes
- Vandal-proof and Weather-proof IP66-rated Housing
- Built-in 802.3af Compliant PoE
- Built-in SD/SDHC Card Slot for On-board Storage
- Built-in Heater and Fan, Supported by PoE
- 3-axis Mechanical Design for Ceiling and Wall Mount Installation
- Supports ONVIF Standard to Simplify Integration and Enhance Interoperability