VIVOTEK FD7160 is a compact, 2-megapixel network camera designed for tough vehicular conditions, especially in public transportation applications such as buses, trains, etc. Its IP66-rated, vandal-proof metal housing effectively provides robust protection from being damaged by water and dust as well as defacement. The combination of the high resolution imaging and protective housing endows the FD7160 with first-rate identification capabilities and the rugged reliability required by mobile surveillance.

By utilizing high definition 1600x1200 resolution, the FD7160 can deliver extremely clear and detailed images, achieving accurate identification of objects or people with ease. Its multiple-stream function allows each video stream to be delivered in a different resolution, frame rate, and image quality for individual quality or bandwidth demands, providing a higher level of flexibility for dealing with camera images on different platforms.

By employing tamper detection, the FD7160 is truly a robust and intelligent camera that keeps security staff notified once it suffers video loss from being blocked or spray-painted. The FD7160 also utilizes PoE (Power-over-Ethernet), allowing it to be operated and powered from a single Ethernet cable, giving greater ease of installation. In order to facilitate on-board storage and data portability, the FD7160 is also complete with a MicroSD/SDHC card slot for local recording.

The FD7160 also offers a broad spectrum of advanced features, including dual codec, QoS for optimized bandwidth efficiency, IPv6 for next generation networks, temperature alarm trigger, HTTPS encrypted data transmission, 802.1X authentication for secure network protection, and 32-CH ST7501 central management software.

### Features

- 2-megapixel CMOS Sensor
- Wide Angle Fixed Lens
- Real-time MPEG-4 and MJPEG Compression (Dual Codec)
- Multiple Streams Simultaneously
- Tamper Detection for Unauthorized Changes
- Temperature Alarm Trigger
- IP66-rated, Tamper- and Vandal-proof Housing
- Built-in 802.3af Compliant PoE
- HTTPS Encrypted Data Transmission
- 802.1X Port-based Authentication for Network Protection
- MicroSD/SDHC Card Slot for On-board Storage
- Includes Free Standard 32-CH ST7501 Central Management Software
## Specifications

### System
- **CPU:** Mozart 120 SoC
- **Flash:** 16MB
- **RAM:** 128MB + 128MB
- **Embedded OS:** Linux 2.6

### Lens
- **Board lens, f = 3.6 mm, F1.8, Fixed**
- **IR Corrected

### Angle of View
- **77° (horizontal)**
- **54° (vertical)**
- **100.2° (diagonal)**

### Shutter Time
- 1/5 sec. to 1/40,000 sec.

### Image Sensor
- 1/3.2" CMOS sensor in 1600x1200 resolution

### Minimum Illumination
- TBD

### Video
- **Compression:** MJPEG & MPEG-4
- **Simultaneous multiple streams MPEG-4 streaming over UDP, TCP, HTTP or HTTPPS
- **MPEG-4 multicast streaming MPEG streaming over HTTP or HTTPS
- **Supports activity adaptive streaming for dynamic frame rate control
- **Supports video cropping for bandwidth saving
- **Supports ePTZ for data efficiency
- **Supports 3GPP mobile surveillance
- **Frame rates:**
  - MPEG-4: Up to 30 fps at 800x600
  - Up to 10 fps at 1600x1200
  - MJPEG: Up to 30 fps at 800x600
  - Up to 15 fps at 1600x1200

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

### Networking
- **10/100 Mbps Ethernet, RJ45**
- **Protocols:** IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP and 802.1X

### Alarm and Event Management
- Triple-window video motion detection
- Tamper detection
- Temperature alarm trigger
- Event notification using HTTP, SMTP or FTP
- Local recording of MP4 file

### On-Board Storage
- MicroSD/SDHC card slot
- Stores snapshots and video clips

### 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 115 mm x 46 mm

### Weight
- TBD

### LED Indicator
- System restore status indicator

### Power
- **Power Consumption:** TBD
- 802.3af compliant Power-over-Ethernet

### Housing
- Metal housing for vandal protection
- Weather-proof IP66-rated housing

### Approvals
- CE, LVD, FCC, VCCI, C-Tick
- EN50155

### Operating Environments
- Temperature: -25 ~ 50 °C (-13 ~ 122 °F)
- Humidity: 90% RH

### Viewing System Requirements
- **OS:** Microsoft Windows 2000/XP/Vista
- **Browser:** Mozilla Firefox, Internet Explorer 6.x or above
- **Cell phone:** 3GPP player
- **Real Player:** 10.5 or above
- **Quick Time:** 6.5 or above

### Installation, Management, and Maintenance
- Camera angle adjustment:
  - pan ±10° and tilt 90° (0° ~ 90°)
- Rugged M12 or RJ45 connector
- Installation Wizard 2
- 32-CH ST7501 central management software
- Supports firmware upgrade

### Applications
- SDK available for application development and system integration

### Warranty
- 24 months

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**System Overview**

- **FD7160**
- **3G Cell Phone**
- **PoE Switch**
- **Internet**
- **Notebook with Web Browser**
- **PC with Recording Software**

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