



<b>System</b> <ul style="list-style-type: none"> <li>CPU: TI DM365 SoC</li> <li>Flash: 128MB</li> <li>RAM: 256MB</li> <li>Embedded OS: Linux 2.6</li> </ul>	<b>Networking</b> <ul style="list-style-type: none"> <li>10/100 Mbps Ethernet, RJ-45</li> <li>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</li> </ul>
<b>Lens</b> <ul style="list-style-type: none"> <li>CS-mount, vari-focal, f = 3 ~ 8 mm, F1.2, auto-iris</li> <li>Removable IR-cut filter for day &amp; night function</li> </ul>	<b>Alarm and Event Management</b> <ul style="list-style-type: none"> <li>Triple-window video motion detection</li> <li>Tamper detection</li> <li>One D/I and one D/O for external sensor and alarm</li> <li>Event notification using HTTP, SMTP or FTP</li> <li>Local recording of MP4 file</li> </ul>
<b>Angle of View</b> <ul style="list-style-type: none"> <li>35.2° ~ 90.7° (horizontal)</li> </ul>	<b>On-board Storage</b> <ul style="list-style-type: none"> <li>SD/SDHC card slot</li> <li>Stores snapshots and video clips</li> </ul>
<b>Shutter Time</b> <ul style="list-style-type: none"> <li>1/5 sec. to 1/40,000 sec.</li> </ul>	<b>Security</b> <ul style="list-style-type: none"> <li>Multi-level user access with password protection</li> <li>IP address filtering</li> <li>HTTPS encrypted data transmission</li> <li>802.1X port-based authentication for network protection</li> </ul>
<b>Image Sensor</b> <ul style="list-style-type: none"> <li>1/3.2" CMOS sensor in 1600x1200 resolution</li> </ul>	<b>Users</b> <ul style="list-style-type: none"> <li>Live viewing for up to 10 clients</li> </ul>
<b>Minimum Illumination</b> <ul style="list-style-type: none"> <li>0.1 Lux / F1.2</li> </ul>	<b>Dimension</b> <ul style="list-style-type: none"> <li>154 mm (D) x 72 mm (W) x 62 mm (H)</li> </ul>
<b>Video</b> <ul style="list-style-type: none"> <li>Compression: H.264, MPEG-4 &amp; MJPEG</li> <li>Streaming:                             <ul style="list-style-type: none"> <li>Simultaneous multiple streams</li> <li>H.264 streaming over UDP, TCP, HTTP or HTTPS</li> <li>MPEG-4 streaming over UDP, TCP, HTTP or HTTPS</li> <li>MPEG-4 multicast streaming</li> <li>MJPEG streaming over HTTP or HTTPS</li> </ul> </li> <li>Supports activity adaptive streaming for dynamic frame rate control</li> <li>Supports video cropping for bandwidth efficiency</li> <li>Supports ePTZ for data efficiency</li> <li>Supports 3GPP mobile surveillance</li> <li>Frame rates:                             <ul style="list-style-type: none"> <li>H.264: up to 30 fps at 800x600 up to 30 fps at 1280x720 up to 15 fps at 1600x1200</li> <li>MPEG-4: up to 30 fps at 800x600 up to 30 fps at 1280x720 up to 15 fps at 1600x1200</li> <li>MJPEG: up to 30 fps at 800x600 up to 30 fps at 1280x720 up to 15 fps at 1600x1200</li> </ul> </li> <li>Interface:                             <ul style="list-style-type: none"> <li>BNC connector for video output</li> <li>NTSC/PAL video output switch</li> </ul> </li> </ul>	<b>Weight</b> <ul style="list-style-type: none"> <li>Net: 664 g</li> </ul>
<b>Image Settings</b> <ul style="list-style-type: none"> <li>Adjustable image size, quality and bit rate</li> <li>Time stamp and text caption overlay</li> <li>Flip &amp; mirror</li> <li>Configurable brightness, contrast, saturation, sharpness, white balance and exposure</li> <li>AGC, AWB, AES</li> <li>Automatic, manual or scheduled day/night mode</li> <li>BLC (Backlight Compensation)</li> <li>Supports privacy masks</li> </ul>	<b>LED Indicator</b> <ul style="list-style-type: none"> <li>System power and status indicator</li> <li>System activity and network link indicator</li> </ul>
<b>Audio</b> <ul style="list-style-type: none"> <li>Compression:                             <ul style="list-style-type: none"> <li>GSM-AMR speech encoding, bit rate: 4.75 kbps to 12.2 kbps</li> <li>MPEG-4 AAC audio encoding, bit rate: 16 kbps to 128 kbps</li> </ul> </li> <li>Interface:                             <ul style="list-style-type: none"> <li>Built-in microphone</li> <li>External microphone input</li> <li>Audio output</li> <li>External/Internal microphone switch</li> </ul> </li> <li>Supports two-way audio via SIP protocol</li> <li>Supports audio mute</li> </ul>	<b>Power</b> <ul style="list-style-type: none"> <li>12V DC</li> <li>24V AC</li> <li>Power consumption: Max. 8 W</li> <li>802.3af compliant Power-over-Ethernet</li> </ul>
	<b>Approvals</b> <ul style="list-style-type: none"> <li>CE, LVD, FCC, VCCI, C-Tick</li> </ul>
	<b>Operating Environments</b> <ul style="list-style-type: none"> <li>Temperature: 0 ~ 50 °C (32 ~ 122 °F)</li> <li>Humidity: 90% RH</li> </ul>
	<b>Viewing System Requirements</b> <ul style="list-style-type: none"> <li>OS: Microsoft Windows 2000/XP/Vista</li> <li>Browser: Mozilla Firefox, Internet Explorer 6.x or above</li> <li>Cell phone: 3GPP player</li> <li>Real Player: 10.5 or above</li> <li>Quick Time: 6.5 or above</li> </ul>
	<b>Installation, Management, and Maintenance</b> <ul style="list-style-type: none"> <li>RS-485 interface for scanners, pan/tilts</li> <li>Installation Wizard 2</li> <li>32-CH ST7501 central management software</li> <li>Supports firmware upgrade</li> </ul>
	<b>Applications</b> <ul style="list-style-type: none"> <li>SDK available for application development and system integration</li> </ul>
	<b>Warranty</b> <ul style="list-style-type: none"> <li>24 months</li> </ul>

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# Fixed Network Camera IP8161

2-megapixel • H.264 • Day & Night



VIVOTEK IP8161 is a professional-series fixed network camera featuring superb image quality and exceptional bandwidth efficiency. It is especially suitable for wide open spaces such as building entrances and airports, or applications requiring accurate identification, such as human faces in banks or vehicle license plates in parking lots.

Featuring a 2-megapixel sensor, this camera is able to provide a wide field of view with exceptional detail when compared to a standard VGA camera, significantly reducing the number of camera installations. The ePTZ function enables users to focus on close-up shots of different areas in the camera's view without moving the camera physically. Users can quickly move to a target area by simply clicking on the video feed from the camera on their screen. In addition, the IP8161 can deliver user-defined thumbnails for viewing instead of video of an entire scene so as to optimize bandwidth and storage efficiency.

The IP8161 supports H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth. With MPEG-4 and MJPEG compatibility, video streams can also be transmitted in either of these formats for versatile applications. The streams can also be individually configured to meet different needs or bandwidth constraints, thereby further reducing bandwidth and storage requirements. Users can receive multiple streams simultaneously in different resolutions, frame rates and image qualities for viewing on different platforms.

Thanks to its day and night function achieved by a built-in removable IR-cut filter, the IP8161 is able to maintain clear images 24 hours a day. Additionally, the IP8161 camera incorporates an adjustment ring to improve lens compatibility with either C- or CS-mount lens, providing system integrators with more flexibility and hassle-free installation for different applications. The built-in SD/SDHC card slot offers a convenient and portable storage option to prevent data loss in case of network disconnection.

The integrated BNC connector allowing the IP8161 to be connected directly to an analog monitor provides enhanced flexibility and usability and ease of installation. Together with PoE, QoS, activity adaptive streaming, and the included 32-CH central management software, the IP8161 is indisputably the top choice for reliable and high performance surveillance.



## Enhancing Field of View and Image Quality with 2MP

### Exceptional Details

The IP8161 is equipped with a 2-megapixel sensor, making it capable of providing highly detailed images. With the IP8161, users can easily and accurately identify minute objects such as vehicle license plates or facial features.

### Wide Coverage

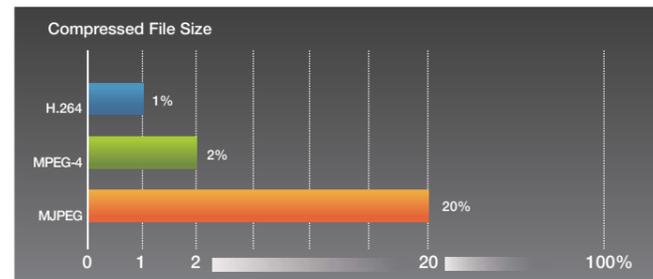
The IP8161 can provide images covering a very wide area due to the wide field of view offered by the 2-megapixel sensor. Users need only a handful of IP8161s to achieve the same coverage that would otherwise require dozens of VGA cameras, dramatically reducing the number of installations.



## Remarkable Compression and Streaming Efficiency

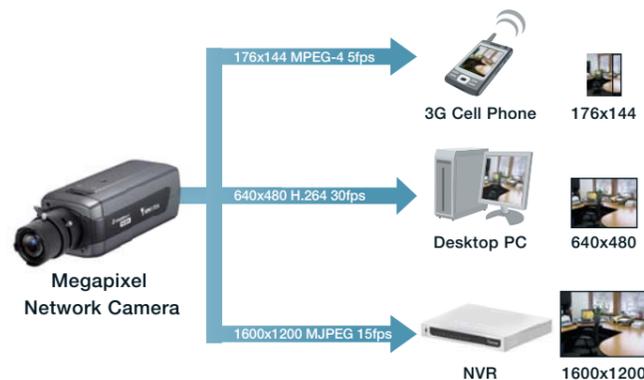
### H.264

H.264 is a 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.



### Multiple Streams

The IP8161 supports multiple streams with each video stream delivered in a different resolution, frame rate, and image quality for individual quality or bandwidth demands. Images can be displayed in VGA format for real-time monitoring while stored in an NVR in megapixel resolution. Multiple streaming gives users a higher level of flexibility for dealing with camera images on different platforms.



### Activity Adaptive Streaming

Activity adaptive streaming enables the IP8161 to allocate bandwidth usage dynamically with a configurable frame rate according to different occasions, such as a low frame rate for normal monitoring and a high frame rate for event-triggered recording. As such, activity adaptive streaming can optimize bandwidth usage during monitoring while ensuring superior image quality during recording.

## Image Capture with Greater Data Efficiency

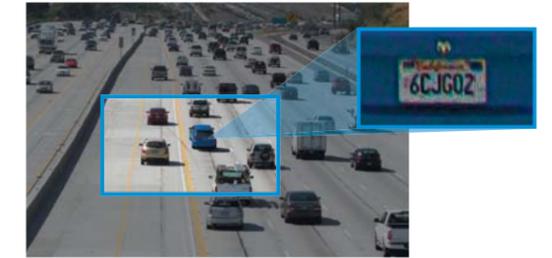
### Cropping

The IP8161 allows users to crop unnecessary information and simply transmit the image of the target region for viewing or storage. As a result, bandwidth resources and storage space can be used more efficiently.



### ePTZ

The IP8161 provides electronic pan/tilt/zoom functions, allowing users to move to a target region in the full view window without changing the camera direction physically. Since only the target region will be transmitted for individual viewing, bandwidth requirements are significantly reduced.



## Full Features for Professional Surveillance

### Clear Images 24/7

The IP8161 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, and at night, the filter is removed to accept infrared light for higher light efficiency.



### SD/SDHC Card

The IP8161 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.



## Product Features

- 2-megapixel CMOS Sensor
- 3 ~ 8 mm Vari-focal, Auto-iris Lens
- Removable IR-cut Filter for Day and Night Function
- Real-time H.264, MPEG-4 and MJPEG Compression (Triple Codec)
- Multiple Streams Simultaneously
- ePTZ for Data Efficiency
- Activity Adaptive Streaming for Dynamic Frame Rate Control
- Tamper Detection for Unauthorized Changes
- Built-in 802.3af Compliant PoE
- Built-in SD/SDHC Card Slot for On-board Storage
- CS- or C-mount Adjustment Ring for Flexible Lens Installation
- BNC Connector for Analog Video Output

