



# IP8166

Fixed Network Camera



2MP · Smart Stream II · SNV · WDR Enhanced · 3DNR · Video Rotation · Defog

VIVOTEK's IP8166 is a professional box network camera equipped with a Full HD sensor enabling a viewing resolution of 1920x1080 at a smooth 30 fps. The IP8166 is capable of capturing high quality, high resolution video at up to 2 Megapixels in low light environments with VIVOTEK's SNV technology, making the camera ideal for a wide range of video surveillance applications, including supermarkets, banks, hotels and parking lots and also suitable for many more situations.

Further empowering this professional 24/7 camera, VIVOTEK's Smart Stream II technology enables the IP8166 to optimize quality for a desired region or area and therefore to maximize efficiency of bandwidth usage. The IP8166 can reduce both bandwidth and storage consumption by up to 50%\* while still retaining the same excellent image quality as a Full HD camera.

To meet the demands of diverse scenarios, the IP8166 is compatible with a variety of accessories, from external IR LEDs and enclosures, to long-range solutions and PoE total solutions. With the added support and flexibility of an abundance of professional accessories, the IP8166 is an excellent candidate for your total surveillance solution.

\* Depending on scene being monitored.

### Smart Stream II

Save up to 50% of bandwidth and storage by optimizing quality for moving regions or ROI.



Without Smart Stream II



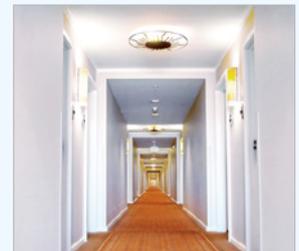
With Smart Stream II

### Key Features

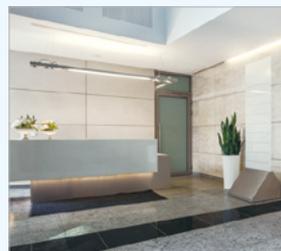
- 2-Megapixel CMOS Sensor
- 30 fps @ 1920x1080
- SNV (Supreme Night Visibility) for Low Light Conditions
- Smart Stream II to Optimize Bandwidth Efficiency
- WDR Enhanced for Unparalleled Visibility in High Contrast Environments
- 3D Noise Reduction for Low-light Conditions
- Video Rotation for Corridor View
- Lens Profile to Ensure the Full Compatibility for Different Lens Options



Low Light



Hotel



Lobby



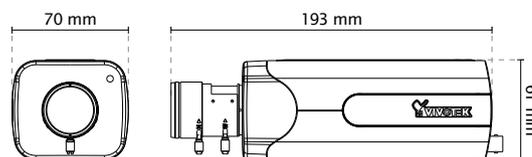
Supermarket

## Technical Specifications

|                               |  |
|-------------------------------|--|
| Model                         | IP8166   |
| <b>System Information</b>     |  |
| CPU                           | Multimedia SoC (System-on-Chip)  |
| Flash                         | 128MB  |
| RAM                           | 256MB  |
| <b>Camera Features</b>        |  |
| Image Sensor                  | 1/2.8" Progressive CMOS  |
| Maximum Resolution            | 1920 x1080 (2MP)   |
| Lens Type                     | Vari-Focal   |
| Focal Length                  | f= 2.8 ~ 12 mm   |
| Aperture                      | F1.4 ~ F2.4  |
| Auto-iris                     | DC-Iris (P-iris reserved)  |
| Field of View                 | 38° ~ 101° (Horizontal)<br>21° ~ 63° (Vertical)<br>40° ~ 122° (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          | 0.08 Lux @ F1.4 (Color)<br>0.001 Lux @ F1.4 (B/W)  |
| Pan/Tilt/Zoom Functionalities | ePTZ:<br>48x digital zoom (4x on IE plug-in, 12x built in)   |
| On-board Storage              | Slot Type: SD/SDHC/SDXC card slot<br>Seamless Recording  |
| <b>Video</b>                  |  |
| Compression                   | H.264 & MJPEG  |
| Maximum Frame Rate            | 30 fps@ 1920x1080<br>In both compression modes   |
| Maximum Streams               | 4 simultaneous streams   |
| S/N Ratio                     | 49 dB  |
| Dynamic Range                 | 70 dB  |
| Video Streaming               | Adjustable resolution, quality and bitrate<br>Smart Stream II  |
| Image Settings                | Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks; Scheduled profile settings, video rotation, 3DNR, defog, lens profile |
| <b>Audio</b>                  |  |
| Audio Capability              | Two-Way Audio (full duplex)  |
| Compression                   | G711, G726   |
| Interface                     | External microphone input<br>External line output  |
| <b>Network</b>                |  |
| 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, UDP, ICMP, ARP, SSL, TLS, CIFS/SMB   |
| Interface                     | 10 Base-T/100 Base-TX Ethernet (RJ-45)<br>*It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  |
| ONVIF                         | Supported, specifications available at <a href="http://www.onvif.org">www.onvif.org</a>  |
| <b>Intelligent Video</b>      |  |
| Video Motion Detection        | Five-window video motion detection   |
| <b>Alarm and Event</b>        |  |

|                             |  |
|-----------------------------|--|
| Alarm Triggers              | Motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection, audio detection  |
| Alarm Events                | Event notification using digital output, HTTP, SMTP, FTP, NAS server and SD Card<br>File upload via HTTP, SMTP, FTP, NAS server and SD card  |
| <b>General</b>              |  |
| Connectors                  | RJ-45 cable connector for 10/100Mbps Network/PoE connection<br>Audio input<br>Audio output<br>DC 12V power input<br>AC 24V Power input<br>Digital input*3<br>Digital output*1<br>BNC Output<br>RS485 |
| LED Indicator               | System power and status indicator  |
| Power Input                 | DC 12V<br>AC 24V<br>IEEE 802.3af PoE Class 0   |
| Power Consumption           | Max. 6.8 W   |
| Dimensions                  | 193 (D) x 70 (W) x 61 (H) mm   |
| Weight                      | 626 g  |
| Safety Certifications       | CE, LVD, FCC Class B, VCCI, C-Tick, UL   |
| Operating Temperature       | Starting Temperature: 0°C ~ 50°C (32°F ~ 122°F)<br>Working Temperature: -10°C ~ 50°C (14°F ~ 122°F)  |
| Humidity                    | 90%  |
| Warranty                    | 36 months  |
| <b>System Requirements</b>  |  |
| Operating System            | Microsoft Windows 7/8  |
| Web Browser                 | Internet Explorer 10/11<br>Chrome version 58.0.3029 or above   |
| Other Players               | VLC: 1.1.11 or above<br>Quicktime: 7 or above  |
| <b>Included Accessories</b> |  |
| CD                          | User's manual, quick installation guide, Shepherd, VAST  |
| Others                      | Quick installation guide, mounting bracket, screw pack, lens   |

## Dimensions



## Compatible Accessories

### Enclosures



**AE-244**  
Camera Enclosure,  
PoE/DC, IR 50M, IP68, IK10,  
-20°C ~ 50°C



**AE-23C**  
Camera Enclosure,  
24VAC/VDC, IP68, IK10,  
-50°C ~ 50°C

### IR Illuminators



**CM4818-2040**  
48W Illuminator, distance 200M,  
-40°C ~ 60°C, 12~24V DC,  
24VAC

### Lens



**AL-242**  
CS mount, 12.5 ~ 50 mm,  
F1.4, P-iris, 1/2.7"



**AL-243**  
CS mount, 7~22 mm,  
F1.4, P-iris, 1/2.7"

### PoE Solution



**AW-GEV-104B-130**  
VivoCam Web Smart 8xGE PoE  
+ 2xGE SFP Switch



**AP-FIC-010A-015**  
Indoor 1xFE IEEE 802.3af  
PoE Injector