



# FD8166A-N

Ultra-mini Fixed Dome  
Network Camera



2MP · 30 fps · Compact Design · 940nm IR · SNV ·  
Smart Stream II · 3DNR · WDR Enhanced · Defog · VIVOCLOUD

VIVOTEK's FD8166A-N is an ultra-mini IR fixed dome network camera with a tiny diameter of only 90 mm. Due to its compact, intelligent design and affordable price, the FD8166A-N is an ideal indoor surveillance solution that suits a wide variety of applications such as retail, offices, boutiques and other public areas.

Equipped with a 2 megapixel Full HD sensor enabling viewing resolution of 1920x1080 at 30 fps, the FD8166A-N is capable of capturing high-definition images whether in high contrast or low light environments by deploying WDR Enhanced and SNV technology. When combined with VIVOTEK's Smart Stream II technology, the FD8166A-N can reduce both bandwidth and storage consumption by up to 50%\* while retaining the same

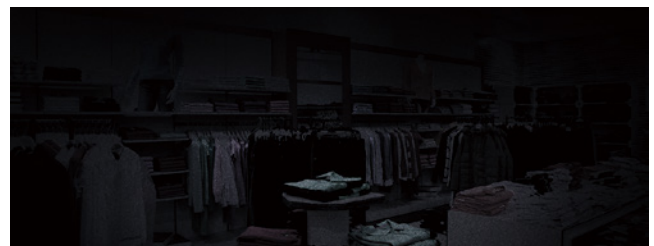
superb image quality as a Full HD camera. Further, armed with 940nm IR illumination, the FD8166A-N is able to see up to 6 meters in total darkness.

As an all-in-one camera, the FD8166A-N is designed for easy installation and equipped with Power over Ethernet (PoE) functionality, making setup both quick and simple. The FD8166A-N is also completely compatible with VIVOTEK's VAST free 32-channel recording software. With all of these benefits and more, the FD8166A-N is a sure bet to fulfill your surveillance needs.

\* Depending on scene being monitored.

## Key Features

- 2-Megapixel CMOS Sensor
- 30 fps @ 1920x1080
- Real-time H.264 and MJPEG Compression (Dual Codec)
- Built-in 940nm Invisible IR Illuminators up to 6 M
- SNV (Supreme Night Visibility) for Low Light Conditions
- Smart IR Technology to Avoid Overexposure
- Smart Stream II to Optimize Bandwidth Efficiency
- WDR Enhanced
- 3D Noise Reduction
- Defog
- Built-in IEEE 802.3af Compliant PoE
- Built-in MicroSD/SDHC/SDXC Card Slot for On-board Storage
- Compact and Stylish Design
- Easy Installation
- VIVOCLOUD Mobile App
- Trend Micro IoT Security within Standard Warranty Period



IR Off



IR On

## Technical Specifications

Model	FD8166A-N
<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	1920x1080 (2MP)
Lens Type	Fixed-focal
Focal Length	f = 2.8 mm
Aperture	F1.8
Field of View	113° (Horizontal) 63° (Vertical) 136° (Diagonal)
Shutter Time	1/5 sec. to 1/32,000 sec.
WDR Technology	WDR Enhanced
Day/Night	Yes
Minimum Illumination	0.05 Lux @ F1.8 (Color) <0.001 Lux @ F1.8 (B/W), 0 Lux with IR illumination on
Pan Range	45°
Tilt Range	33° ~ 90°
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)
IR Illuminators	Built-in 940nm IR illuminators, effective up to 6 meters with Smart IR
On-board Storage	Slot type: MicroSD/SDHC/SDXC card slot Seamless Recording
<b>Video</b>	
Compression	H.264 & MJPEG
Maximum Frame Rate	30 fps @ 1920x1080 In both compression modes
Maximum Streams	4 simultaneous streams
S/N Ratio	47dB
Dynamic Range	70dB
Video Streaming	Adjustable resolution, quality and constant bitrate control 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, 3D noise reduction, video rotation, defog
<b>Audio</b>	
Audio Capability	One-way audio
Compression	G.711, G.726
Interface	Built-in microphone
Effective Range	5 meters
<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 BaseTX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
ONVIF	Supported, specification 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, periodical trigger, system boot, recording notification, camera tampering detection, audio detection
Alarm Events	Event notification using HTTP, SMTP, FTP, NAS server and MicroSD Card File upload via HTTP, SMTP, FTP, NAS server and MicroSD card
<b>General</b>	
Connectors	RJ-45 cable connector for 10/100Mbps Network/PoE connection
LED Indicator	System power and status indicator
Power Input	IEEE 802.3af PoE Class 2
Power Consumption	Max. 4.75 W
Dimensions	Ø 90 x 50 mm
Weight	145.8 g
Safety Certifications	CE, LVD, FCC Class B, VCCI, C-Tick, UL
Operating Temperature	Starting Temperature: 0°C ~ 50°C (32°F ~ 122°F) Working Temperature: -10°C ~ 50°C (14°F ~ 122°F)
Humidity	90%
Warranty	24 months
<b>System Requirements</b>	
Operating System	Microsoft Windows 8/7
Web Browser	Internet Explorer 10/11 Chrome version 58.0.3029 or above
Other Players	VLC: 1.1.11 or above Quicktime: 7 or above
<b>Included Accessories</b>	
Others	Quick installation guide, warranty card, screws pack, focus kit
<b>Dimensions</b>	

