



FD8166A-N

Ultra-mini Fixed Dome
Network Camera



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

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)
- SNV (Supreme Night Visibility) for Low Light Conditions
- Built-in 940nm IR Illuminators up to 6 Meters
- Smart IR Technology to Avoid Overexposure
- Smart Stream II to Optimize Bandwidth Efficiency
- WDR Enhanced
- 3D Noise Reduction
- Video Rotation for Corridor View
- 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



IR Off



IR On

Technical Specifications

Model	FD8166A-N
System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	128MB
RAM	256MB
Camera Features	
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
Video	
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
Audio	
Audio Capability	Audio input
Compression	G.711, G.726
Interface	Built-in microphone
Effective Range	5 meters
Network	
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

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 www.onvif.org
Intelligent Video	
Video Motion Detection	Five-window video motion detection
VCA	Line crossing detection, field detection, loitering detection *Available per project request.
Alarm and Event	
Alarm Triggers	Motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection, audio detection
Alarm Events	Event notification using HTTP, SMTP, FTP, NAS server and SD Card File upload via HTTP, SMTP, FTP, NAS server and SD card
General	
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
System Requirements	
Operating System	Microsoft Windows 7/Vista/XP/2000
Web Browser	Mozilla Firefox 7~43 (Streaming only) Internet Explorer 7/8/9/10/11
Other Players	VLC: 1.1,11 or above Quicktime: 7 or above
Included Accessories	
Others	Quick installation guide, warranty card, screws pack, focus kit
Dimensions	

