



# FD8165H

Fixed Dome Network Camera

2MP · WDR Pro · Smart IR · 3DNR · Smart Focus System

VIVOTEK FD8165H is a professional indoor network dome camera offering up to 60 fps @ 2-Megapixel resolution with superb image quality.

Featuring the Wide Dynamic Range Technology WDR Pro, this camera provides improved visibility in dark & light environments. Combined with 3D Noise Reduction Technology, which enables the FD8165H to capture clear, polished video under low-light conditions and reduce bandwidth from sensor noise, users can enjoy superb image detail in all lighting conditions.

Additionally, as a professional day/night camera, FD8165H adopts Smart IR technology which prevents overexposure and provides noise reduction by instantaneously adjusting IR lighting intensity to suit changes in ambient light.

To provide top-notch image quality, the FD8165H also comes with a P-iris lens, which controls the iris with extreme precision via its built-in stepper motor. The iris opening is kept at an optimal level at all times, resulting in superior image sharpness and depth of field. Furthermore, because installation and adjustment of a megapixel network camera can be difficult due to the level of image detail, the FD8165H is equipped with VIVOTEK's Smart Focus System to allow remote focus and zoom adjustment.

## Key Features

- 2-Megapixel CMOS Sensor
- 30 fps @ 1920x1080  
60 fps @ 1920x1080 (one-stream mode only)
- Motorized, P-iris Lens
- Removable IR-cut Filter for Day & Night Function
- Built-in IR Illuminators, Effective up to 20 Meters
- Smart IR Technology to Avoid Overexposure
- 3D Noise Reduction for Low-light Conditions
- WDR Pro to Provide Improved Visibility in Extremely Bright and Dark Environments
- Smart Focus System for Remote and Precise Focus Adjustment
- Two-way Audio



With WDR Pro

Without WDR Pro



Main Station Lobby



Hotel Sidewalk



Office



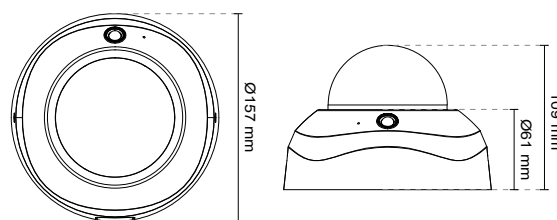
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## Technical Specifications

Model	FD8165H
<b>System Information</b>	
CPU	Multimedia SoC (System-on-Chip)
Flash	256MB
RAM	384MB
<b>Camera Features</b>	
Image Sensor	1/2.8" Progressive CMOS
Maximum Resolution	1920x1080 (2MP)
Lens Type	Vari-focal, Remote Focus
Focal Length	f = 3 ~ 10 mm
Aperture	F1.3 ~ F2.5
Auto-iris	P-iris/DC-iris (Reserved)
Field of View	33° ~ 104° (Horizontal) 19° ~ 56° (Vertical) 39° ~ 121° (Diagonal)
Shutter Time	1/5 sec. to 1/10000 sec.
WDR Technology	WDR Pro
Day/Night	Removable IR-cut filter for day & night function Smart IR Technology to avoid overexposure
Minimum Illumination	0.16Lux @ F1.3 (Color) 0.001 Lux @ F1.3 (B/W)
Pan/tilt/zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built in)
IR Illuminators	Built-in IR illuminators, effective up to 20 meters IR LED*4, with Smart IR Technology
On-board Storage	MicroSD/SDHC/SDXC card slot
<b>Video</b>	
Compression	H.264, MJPEG
Maximum Frame Rate	30 fps @ 1920x1080 60 fps @ 1920x1080 (one-stream mode only) In both compression modes
Maximum Streams	2 simultaneous streams
S/N Ratio	62 dB
Dynamic Range	Up to 100dB
Video Streaming	Adjustable resolution, quality and bitrate
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, seamless recording
<b>Audio</b>	
Audio Capability	Two-way audio (full duplex)
Compression	AAC, G.711, G.726
Interface	External microphone input Audio 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
Interface	10Base-T/100 BaseTX Ethernet (RJ-45)
ONVIF	Supported, specification available at <a href="http://www.onvif.org">www.onvif.org</a>

<b>Intelligent Video</b>	
Video Motion Detection	Triple-window video motion detection
<b>Alarm and Event</b>	
Alarm Triggers	Video motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection
Alarm Events	Event notification using digital output, HTTP, SMTP, FTP and NAS server File upload via HTTP, SMTP, FTP and NAS server
<b>General</b>	
Smart Focus System	Remote focus
Connectors	RJ-45 for Network/PoE connection Audio input/output AV output AC 24V power input DC 12V power input Digital input*1 Digital output*1
LED Indicator	System power and status indicator
Power Input	DC12V/AC24V IEEE 802.3af PoE
Power Consumption	DC 12V: Max. 7.6 W AC 24V: Max. 8.6 W PoE: Max. 10.6 W
Dimensions	Ø: 157 mm x 109 mm
Weight	Net: 758g
Safety Certifications	CE, LVD, FCC Class B, VCCI, C-Tick, UL
Operating Temperature	Starting Temperature: -10°C ~ 50°C (14°F~ 122°F) Working Temperature: -20°C ~ 50°C (-4°F~ 122°F)
Warranty	36 months
<b>System Requirements</b>	
Operating System	Microsoft Windows 7/Vista/XP/2000
Web Browser	Mozilla Firefox 7-10 (streaming only) Internet Explorer 7/8/9/10/11
Other Players	VLC: 1.1.11 or above Quicktime: 7 or above
<b>Included Accessories</b>	
CD	User's manual, quick installation guide, Installation Wizard 2, ST7501 32-channel recording software
Others	Quick installation guide, warranty card, alignment sticker, L-type hex key wrench, screws, hex nut, AV cable, power cable

## Dimensions



## Compatible Accessories

### Mounting Kits



**AM-215**  
L Shape Bracket



**AM-516**  
Adaptor Ring



**AM-520**  
Mounting Adaptor

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