

A solid red circle.

IPC501-FC-8M-T Camera Data Sheet

Contents

Overview	3
Key features	3
Specifications	5
Dimensions	9
Additional information	9
Document history	9

I Overview

Adopting a 8 megapixel progressive scan CMOS sensor with a 2.8mm fixed lens, the network camera can provide a high-definition professional surveillance and security solution. It is a professional camera for color imaging in ultra-low light conditions, ensuring colorful image 24/7 with vivid details, commonly used in commercial buildings, parks and small project applications.

- Captures 8MP Full HD Video
- With LEDs, Full-color Effect, Night Vision Distance Up to 30m (98ft)
- H.265+ Reduces Bandwidth and Storage, While Preserving High Image Quality
- Water and Dust Resistant (IP67), Vandal Resistant (IK10)
- Focusing on Human and Vehicle Classification
- ONVIF® Profile G, S and T Conformant
- Clear Imaging Against Strong Backlight Due to WDR



I Key features

Plug and play PoE connection

With only a single ethernet cable to get powered and transmit video, PoE (Power over Ethernet) cameras allow you to DIY their positions anywhere you want. No need of a separate power adapter for power supply of each camera, simplifying installation and helping to keep costs low.

120dB true WDR

Cameras with True Wide Dynamic Range (True WDR) can produce images even under varying light conditions. It can also maintain proper image brightness, exposure and contrast to ensure good image clarity. WDR is measured in dB. A WDR of range (120dB) can capture greater scale of brightness.

3D DNR

Developed for shooting at night or in dimly lit places, 3D Digital Noise Reduction (DNR) decreases picture noise and reduces colourmixture errors. 3D DNR removes the grainy fuzzy appearances of low light images, will handle moving objects without leaving tails behind, and in low light, it makes an image clearer and sharper compared to no noise reduction or 2D DNR. 3D DNR is essential to producing a clear image from your security cameras.

Smart IR technology

Smart IR technology can detect the infrared (IR) wavelengths, enabling the cameras to see even in low light condition or in complete darkness, and providing protection day and night.

IP67 ingress protection

IP67 rated housing protects the camera against rain and dust. Capable of withstanding temperatures from $-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$ ($-22^{\circ}\text{F} \sim 140^{\circ}\text{F}$), the cameras perform well even in demanding environments.

Smart behavior detection

With advanced video algorithm, cameras support smart behavior detections, such as motion detection, line-crossing and area intrusion. Focusing on human body, smart behavior detections enjoy the reduction of false alarm, and send instant notifications when detecting intrusion targets.

H.265 and smart encoding technology

Smart encoding technology can reduce storage costs without sacrificing resolution and frame rate. Under the same configuration, H.265 with smart encoding technology only costs one hard disk to store the same video record which needs four hard disks under H.264, saving 75% storage cost.

Multiple ways of management

The camera supports different ways of management. Free monitoring softwares and Apps are available to view, manage and record the camera through the connected NVR, computer or mobile phone.

Specifications

Table 1 shows the technical specification for FS IPC501-FC-8M-T.

Table 1. Technical specification

Camera	
Sensor	1/1.8", 8.0 megapixel, progressive scan, CMOS
Minimum Illumination	Colour: 0.001Lux (F1.0, AGC ON)
Shutter	Auto/Manual, 1 ~ 1/100000s
Adjustment Angle	Pan: 0° ~ 360°
WDR	120dB
S/N	>56dB
Lens	
Lens Type	2.8mm@F1.0
Field of View (H)	112.9°
Field of View (V)	59.1°
Field of View (D)	121.2°
DORI	
DORI Distance (m)	Detect: 63.0 Observe: 25.2 Recognize: 12.6 Identify: 6.3
Illuminator	
LED Distance	Up to 30m (98ft)
LEDs Number	2
LED On/Off Control	Auto/Manual
Video	
Video Compression	Ultra265, H.265, H.264, MJPEG
H.264 Code Profile	Baseline profile, Main profile, High profile

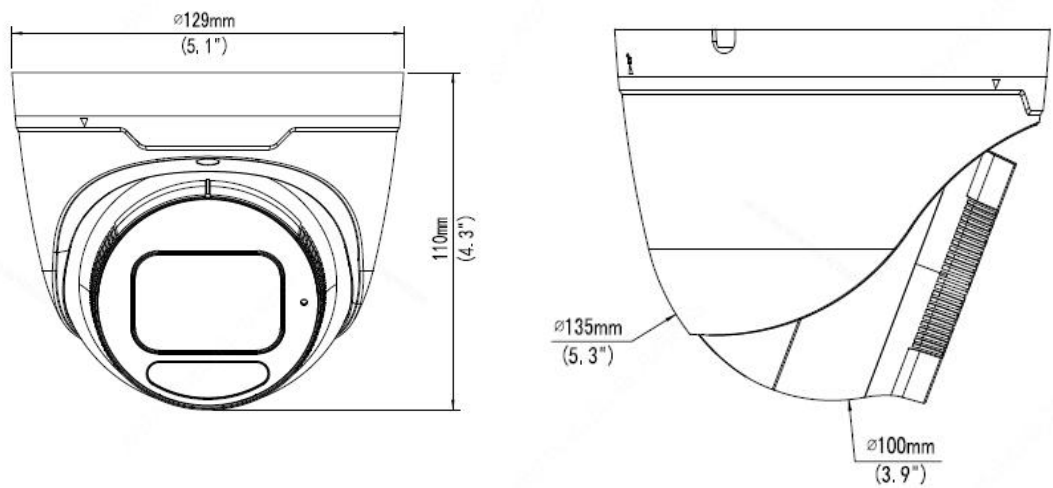
Frame Rate	Main Stream: 8MP (3840*2160), Max 30fps; 5.3MP (3072*1728), Max 30fps; 3.6MP (2560*1440), Max 30fps; 1080P (1920*1080), Max 30fps; 720P (1280*720), Max 30fps; Sub Stream: 1080P (1920*1080), Max 30fps; 720P (1280*720), Max 30fps; D1 (720*576), Max 30fps; 640*360, Max 30fps; 2CIF(704*288), Max 30fps; CIF(352*288), Max 30fps; Third Stream: D1 (720*576), Max 30fps; 640*360, Max 30fps; 2CIF(704*288), Max 30fps; CIF(352*288), Max 30fps;
Video Bit Rate	128 Kbps~16 Mbps
U-code	Support
ROI	Up to 8 areas
Video Stream	Triple streams
OSD	Up to 8 OSDs
Privacy Mask	Up to 4 areas
Image	
White Balance	Auto/Outdoor/Fine Tune/Sodium Lamp/Locked/Auto2
Image Setting	Image rotation, brightness, saturation, contrast, sharpness, gain adjustable by web browser
Digital Noise Reduction	2D/3D DNR
Smart Illumination	Support
Flip	Normal/Vertical/Horizontal/180° /90° Clockwise/90° Anti-clockwise
Dewarping	N/A
HLC	Support
BLC	Support
Defog	Digital Defog
Intelligent	
Smart Intrusion Prevention	Support false alarm filtering: Line crossing detection, Intrusion detection, Region entrance detection, Region exit detection
Face Capture	Support
Statistical Analysis	People counting, support tripwire people counting and area people counting
Events	
Basic Detection	Motion detection, Tampering alarm, Audio Detection

General Function	Watermark, IP Address Filtering, Alarm input, Alarm output, Access Policy, ARP Protection, RTSP Authentication, User Authentication
Audio	
Audio Compression	G.711
Audio Bitrate	64 Kbps
Two-way Audio	Support
Suppression	Support
Sampling Rate	8KHZ
Storage	
Edge Storage	Micro SD, up to 256 GB
Network Storage	ANR, NAS (NFS)
Network	
Protocols	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, 802.1x, SNMP, QoS, RTMP,SSL/TLS, SSH
Interoperability	ONVIF® Profile G, ONVIF® Profile S, ONVIF® Profile T specification at onvif.org , API, SDK
Compliance	NDAA Section 889 compliant
User/Host	Up to 32 users; 2 user levels: administrator and common user
Security	Password protection, Strong password, HTTPS encryption, Export operation logs, Basic and digest authentication for RTSP, Digest authentication for HTTP, TLS 1.2, WSSE and digest authentication for ONVIF
Client	EZStation EZView EZLive
Web Browser	Plug-in required live view: IE9+, Chrome 41 and below, Firefox 52 and below Plug-in free live view: Chrome 57.0+, Firefox 58.0+, Edge 16+
Interface	
Audio I/O	Input: impedance 35kΩ; amplitude 2V [p-p] Output: impedance 600Ω; amplitude 2V [p-p]
Alarm I/O	1/1
RS485	N/A

Built-in Mic	Support
Built-in Speaker	N/A
WIFI	N/A
Network	1 RJ45 10M/100M Base-TX Ethernet
Video Output	N/A
General	
Power	DC 12V±25%, PoE (IEEE 802.3af) Power consumption: Max 11W
Power Interface	Ø 5.5mm coaxial power plug
Dimensions (Ø x H)	Φ129x 110mm (Φ5.1" x 4.3")
Weight	0.64kg (1.41lb)
Material	Metal
Operating Conditions	-30° C ~ 60° C (-22° F ~ 140° F), Humidity: ≤95% RH (non-condensing)
Storage Environment	-30° C ~ 60° C (-22° F ~ 140° F), Humidity: ≤95% RH (non-condensing)
Surge Protection	4KV
Reset Button	Support
Protection	Ingression protection: IP67 Vandal resistant: IK10

*ONVIF is a trademark of ONVIF, Inc.

Dimensions



Additional information

For more information about the IPC501-FC-8M-T camera, contact your account manager or visit <https://www.fs.com/products/169296.html>

Document history

New or revised topic	Described in	Date
Updates to FS IPC501-FC-8M-T Camera Data Sheet	Updated all	03/13/2023



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