



FS-IP5000 FullSight IP 5.0 Megapixel 360 Degree Camera

Bid-Spec

1.0 Description

The FS-IP5000 camera is an MJPEG or H.264 encoding, 5.0 Megapixel resolution, IP addressable 360 degree camera. It is designed to deliver full motion high definition progressive scan digital video across local area networks. The FS-IP5000 features a design with no moving parts, creating a full 360 degree view with no blind spots. An optically corrected fish-eye lens designed exclusively for the FullSight camera allows for immersive 360 degree live view as well as pan-tilt-zoom during playback with the use of Sentry 360's API or SDK with any 3rd party Network Video Recording Software Certified Partner. User Interface options of live or playback can be one of the following: Panoramic Display, Quad Virtual Camera display, Single Virtual PTZ camera display, panoramic with 2 virtual camera display with calibrated PTZ capability between the panoramic image and virtual cameras.

2.0 Bid Specification

- The camera shall utilize one high sensitivity 5.0 Megapixel CMOS sensor with a 1/2" optical format.
- The camera shall support MJPEG or H.264 encoding format.
- The camera shall output at a maximum resolution of 2560(H) x 1920(V) pixels per sensor.
- The camera's maximum frame rate shall be 14 frames per second at the reduced resolution of 2560 (H) x 1920(V).
- The camera shall use one 1/2" 1.4mm f-theta optical proprietary designed fisheye lens that shall be pre-mounted and focused on the camera.
- The camera's overall imaging shall provide a 180/360 degree field of view.
- The camera shall feature streaming of the full field of view (FOV) and multiple regions of interest (ROI) for forensic zooming.
- The camera shall be equipped with a 100 Mbps LAN connector and will deliver image data at a maximum data rate of 65 Mbit/s per camera.
- The camera shall provide 21 levels of compression quality for optimal viewing and archiving.
- The camera shall support a minimum TCP/IP, HTTP, FTP, RTP/RTSP, and DHCP network protocols.
- The camera shall feature automatic exposure, automatic multi-matrix white balance, shutter speed control, programmable brightness, saturation, gamma and sharpness.
- The camera shall incorporate necessary algorithms and circuits to detect motion in low light with clarity.
- The camera shall support a minimum illumination of .30 lux (.03 fc)
- The camera's primary power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard.
- The camera shall have the alternative option to be powered from a 12V DC power source providing at least 4W @ 1.0Amp of power.
- This camera shall feature a durable aluminum housing that minimizes fire hazards.
- The camera should be mounted using a customized interior dome, exterior dome or recessed mounting kit.
- The camera's operating ambient temperature is -10°C (14°F) to 50°C (122°F).
- The camera will have a factory burned in MAC (Media Access Control) address ranging from 00:50:C2:A9:80:00 to 00:50:C2:A9:8F:FF that is registered and owned by Sentry 360 Security through IEEE Registration Authority.



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-In the case of resolution set by clipping the frame rate will grow while field of view will be reduced. Coordinates of the clipped area in the respect to the full frame image can be specified

Width x Height	Frames-Per-Second
2560x1920	14
2560x1600	16
1920x1080	30 (full 1080p)
1600x1200	30
1280x1024	40

-Maximum frame rates for typical resolutions (clipped mode) are given below
 In the case of scaling both field of view and frame rate of the full-frame image are preserved.
 -Minimum light requirement to produce a color image shall be approximately 0.30 lux (0.03 fc) with a f1.2 lens and frame rate of 5fps.

Quick-Spec

3.0 Minimum Performance Specification

The FS-IP5000 megapixel camera will meet the following operating requirements:

Operational

Imaging	One 5.0 megapixel CMOS image sensor 1/2" optical format (7.7mm x 6.1mm)
Active Pixel Count	2560(H) x 1920(V) pixel array per sensor
Dynamic range	60 dB
Auto Recovery	Embedded watchdog
Luminance	.30 lux (0.03 fc)

Image

Format	JPEG still images and Motion-JPEG video or H.264
Compression	High speed hardware-based image compression

Full Field of View (FOV) Resolutions

2560x1920 (HxW) 5 megapixel
 1280x1024 (HxW) 1/4 resolution

Data Transmission

Data Rate	5Mbps
Video Frame Rate	14 fps @ 2560x1920 (HxW)
Max Frame Rate	40 fps @ 1280x1024 (HxW)

Environmental

Operating Temperature	-10 to 50 Degrees Celsius
Storage Temperature	-40 to 70 Degrees Celsius
Humidity	0% to 90% relative, non condensing
Protection Level	IP65



Regulatory

Emissions	FCC: Part 15, Class B
Certification	CE
Safety	UL Listed

Supported Protocols

Standards	TCP/IP, HTTP, FTP, RTP/RTSP, DHCP and more
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Security

Access	Password / username protection for restricted camera access
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Electrical

DC Voltage	12 VDC +/- 10% Power
Consumption	4 watts maximum
Power over Ethernet	PoE 802.3af compliant

Camera Networking Requirements

- For ease of operation FS-IP5000 possesses a built-in web, TFTP and HTTP servers which can be used to acquire images from the camera and adjustment of camera operation parameters.
- Images from the camera can be received using practically any internet browser by means of sending human-readable API requests from the browser command line.
- The camera possesses build in ActiveX component that provides extended functionality when used with Microsoft IE. This option provide easy to use graphical user interface.
- Built in ActiveX component provides ability to view streaming video from the camera and to capture separate images as well as video stream using codecs available on the host computer.
- ActiveX component provides convenient access to the camera settings, and operation statistics.
- The camera provides integrated support for IP, TCP, UDP, ICMP, ARP, DHCP, HTTP, RARP, BOOTP, and TFTP protocols.
- Software for viewing and controlling the camera(s)is provided with camera with no additional charge
- Camera shell provide simultaneous support for up to 16 clients. Image parameters (size, quality) are independently configured for each client. When number of client is used network/camera bandwidth is shared among all the clients.
- Practically achievable network speed is 65 Mbit/s per camera
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Event (Alarm) Handling Capability

- Alarm events can be triggered by motion detection in certain zones. In the case when alarm occurred a specified number of images after/before the event can be saved along with the time stamp of the alarm.

Connectors

- RJ-45 Ethernet connector (IEEE 802.3af PoE compliant)
- Power Supply: 2-pin captive terminal screw terminal.

Power Specification

- Power Consumption: less than 4.0 watts
- Power requirement: 10-16 VDC o via a two-pin removable connector or via IEEE 802.3af Power over Ethernet on CAT-5 cable.



- A&E Specifications
FS-IP5000

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Mechanical Specifications

- -Weight (without lens): 5oz. (150 g)
- -Dimensions w/o lens: 1.38 H x 2.52 W x 3.27 D in.
- 35 H x 64 W x 83 D mm
- -Lens mount: Native CS-mount or C-mount with a C/CS adapter.
- -Camera Mount: 1/4-20 UNC (top and bottom)
- -Camera contains no moving parts.

Environmental Specifications

- -Operating temperature range: -20° C to +50° C (-4° F to +122° F)
- 1. -Humidity: 10% to 80%, non-condensing

Example:

FS-IP5000 FullSight 5.0 MP Vandal Dome 360-degree camera

Warranty

Minimum 1 Year parts and labor

Sentry 360 Security, Inc. reserves the right to change products or specifications without notice.