

Product Specifications

2 Mega-pixel PoE Fisheye IP Camera

ICA-8200

Version 1.0

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Change History:

Revision	Date	Author	Change List
Version 1.0	2014/09/17	Brandon	Initial release

Author	Brandon	Editor:	Brandon
Reviewed by:	Jonas	Approved by:	Tom

1. PRODUCT DESCRIPTION



Compact Wireless Panoramic Camera for Wide View Surveillance

PLANET ICA-8200 2 mega-pixel PoE Fish-Eye IP Camera supports H.264, MPEG-4 and JPEG compression formats and delivers excellent picture quality in up to 1440 x 1440 pixels at 15 frames per second (fps). Incorporating the professional 2 mega-pixel resolution sensor, the ICA-8200 provides high-quality images and panorama function with quad view to enable images of monitoring and recording from four different angles to be displayed simultaneously. It offers 180° panoramic view by wall mount installation and 360° surround view in deployment of ceiling mount. Therefore, users do not need to install multiple IP cameras and hence save tremendous installation and maintenance costs. Moreover, the unique design makes it the ideal solution to surveillance applications in boutiques, stores, restaurants, indoor public areas, etc.

Full Surveillance with 360° Surround View

Furthermore, the ICA-8200 is a fish-eye camera that allows you to monitor all angles of a location using just one camera and thus save lots of the traditional mechanical Pan/Tilt maintenance cost. The distorted hemispherical image of the fish-eye camera will be converted into the conventional rectilinear projection. Without installing any software, you can watch live view and utilize functions such as motion detection and camera tampering through the Web interface using a web browser. Distortion correction feature of the ICA-8200 can fix the camera video so you can use e-PTZ to zoom in, zoom out, and pan across your camera's video to survey a large area easily.

Exceptional Image Quality

Together with powerful image processing attributes like Wide Dynamic Range and Dimension Noise Reduction technology, the ICA-8200 is able to filter the intense backlight surrounding a subject and remove noises from video signal. Thus, the ICA-8200 offers an extremely sharp and clear image quality even under any challenging lighting conditions.

Day & Night Functionality

The ICA-8200 features an automatic, removable infrared-cut filter, which enables the camera to provide color video when there is sufficient light, and black and white video in dark conditions. The camera is able to maintain clear images 24 hours a day.

Advanced Event Management

The ICA-8200 provides surveillance functions including DI/DO alarm, micro SD card support for local storage, and 2-way audio that enables audio communication between local and remote ICA-8200 sites by connecting the external microphone and speaker. It can also be applied in video conferencing via the 2-way audio features.

Motion Detection & Alarms

It is easy to configure motion detection windows by the web management interface of camera. Users can have total control in determining the object and sensitivity of these motion detection windows. The ICA-8200 is able to send email notifications, alerts and snapshots to any dedicated email account. This will alert the user of any event in real time, no matter where the recipient may be.

Flexible Installation and Power Functionality

The ICA-8200 incorporates IEEE 802.3af Power over Ethernet technology and can be powered from a PoE switch or PoE injector via the network, which eliminates the need for power cables and reduces installation costs. The ICA-8200 is ONVIF-compliant and therefore interoperable with other brands in the market, greatly supporting users to integrate with their existing surveillance network. In addition, the ICA-8200 includes 64-CH central management software for efficient monitoring. The ICA-8200 is indisputably the top choice for reliable and high performance surveillance.

2. PRODUCT FEATURES

➤ **Camera**

- Fish-Eye Lens to bring 360° /180° panoramic wide angle view
- 1/2.5" 2 mega-pixel progressive scan CMOS sensor
- Unique Fish-Eye hardware correction technology
- 1.9 lux minimum illumination at F2.0
- 9 different video modes including digital PTZ function
- Removable IR-cut Filter for Day & Night Function

➤ **Video / Audio**

- H.264 and M-JPEG video compression simultaneously
- Simultaneous multi-stream support
- H.264 high profile, main profile and baseline
- Up to 15fps for 1440 x 1440 resolutions
- 2DNR to improve picture quality at low lux
- WDR enhancement function strengthens visibility under extremely bright or dark environments
- Two-way audio support with enhanced audio quality

➤ **Network and Configuration**

- Compliant with IEEE 802.3af PoE interface for flexible deployment
- Auto MDI/MDI-X supported
- UPnP® support for network setup and configuration
- RTSP / UPnP / HTTPS protocols selectable

➤ **Easy Installation & Management**

- Advanced e-PTZ, including preset point
- 10 motion detection areas / E-mail and FTP alert
- Micro SD card local video recording supported

- Digital Input/Output for integration with sensors and alarms
- Cam Viewer 3 Central Management Software supported

3. PRODUCT SPECIFICATIONS

3.1 COMPONENTS

CPU	Multimedia SoC
RAM	DDR-2 512MB
Flash	16MB

3.2 Functional Specifications

Product	ICA-8200
Camera	
Image Device	1/2.5" 2 mega progressive scan CMOS image sensor
Lens	FOV=180±5°(D/H/V), F=2.0, f=1.25mm Mechanical IR-cut Filter Angle of view : 360 degrees
Min Illumination	1.9 lux @ F2.0, without IRE (Color) 0.1 lux @ F2.0, without IRE (B/W)
Effective Pixels	1440 x 1440 pixels
Video	
Video Encoder	H.264 / M-JPEG / MPEG-4
Video Resolution	H.264: 1440 x 1440 / 1600 x 1200 / 1280 x 1024 / 800 x 600 / 640 x 480 M-JPEG: 1440 x 1440 / 1600 x 1200 / 1280 x 1024 / 800 x 600 / 640 x 480 MPEG4: 1440 x 1440 / 1600 x 1200 / 1280 x 1024 / 800 x 600 / 640 x 480
Frame Rate	Up to 15fps for 1440 x 1440 resolutions
Image Setting	Day / Night mode 2D noise reduction WDR Brightness, Saturation, Contrast, Sharpness Rotate/Mirror Text, time and date overlay
Streaming	Streaming over UDP, TCP, or HTTP M-JPEG streaming over HTTP (server push) Controllable frame rate and bandwidth Constant and variable bit rate (M-JPEG / H.264) Simultaneous multi-profile streaming ROI
Rate Control	CBR (Constant Bit Rate) VBR (Variable Bit Rate)
UI Layout	Source view (10) 180° Single broad view (1P wall) 360° Panoramic view (1P ceiling) 360° Quad view (4R) 360° Double broad view (2P) 180° Triple view (1P2R) 360° Triple view (1P2R) Triple with Source view (102R) Quad with Source view (103R)
Audio	

Audio Streaming	2-way audio
Audio Compression	RTSP: G.711 64kbps
Microphone	Built-in microphone
Speaker	Built-in speaker
Network and Configuration	
Network Standard	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX
Network Protocol	HTTP, HTTPS, TCP/ IP, IPv4, UDP, SMTP, FTP, DHCP, DDNS, NTP, DNS, ARP, RTSP, RTP, UPnP, ONVIF (Profile S), Multicast
Security	Password Protection, Https encryption, User accesslog
Users	Depending on streaming data rate used
System Integration	
Application Programming Interface	Open API for software integration ONVIF
Alarm Triggers	Intelligent video motion detection
Alarm Events	File upload via FTP, e-mail or Micro SD card Notification via e-mail
Environment	
Power Requirements	12V DC, 2A IEEE 802.3af Power over Ethernet Class 3
Power Consumption	Max. 6W
Operating Temperature	0 ~ 50 degrees C
Operating Humidity	20 ~ 80% (non-condensing)
Weight	324g
Dimensions (Φ x H)	194 x 49mm
Emission	CE, FCC
Connectors	10/100Mbps Ethernet, RJ-45 DC power jack Terminal block for 1 alarm input and 1 output Audio in Audio out Micro SD/SDHC card (max. 32GB, Class 6) Factory default reset button

3.3 PHYSICAL SPECIFICATIONS

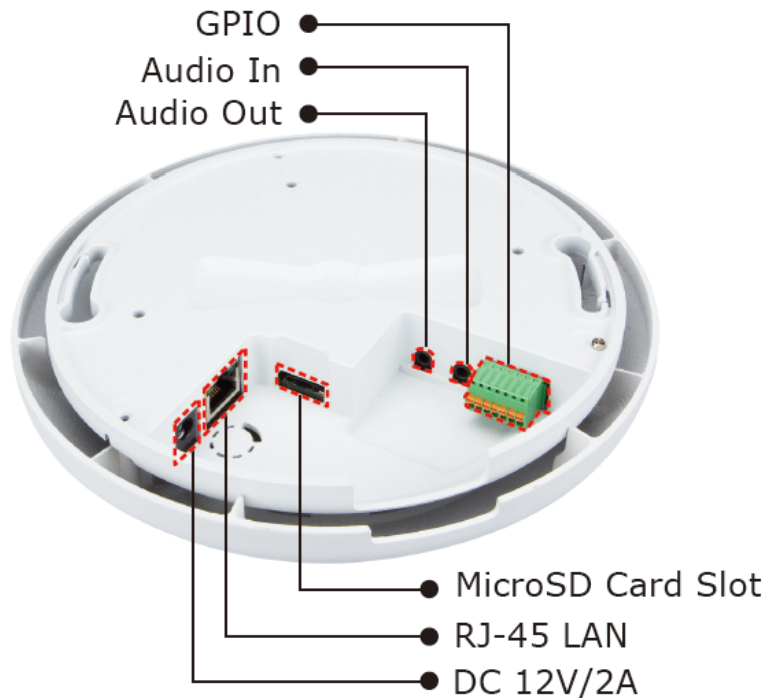
Dimensions (Φ x H)	194 x 49 mm
Weight	324g (gross weight)

➤ **Front Panel**



Interface	Description
Light Sensor	It is for detecting the IP camera environment that illuminates. When the camera is in night mode, the IR-cut filter is switched off, giving more sensitive to infrared light.
Mic	The IP camera has a built-in internal microphone. This microphone is hidden in the pinhole located on the front panel.
Reset Button	This button is hidden in the pinhole. Please refer to the user's manual for more information.
Speaker	The IP Camera has a built-in internal speaker. This speaker is hidden in the pinhole located on the front panel.

➤ **Bottom Panel**



Interface	Description
Power Jack	The input power is 12V DC.
RJ-45 LAN socket	Connection to PC or Hub/Switch. It is connected to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-way protocol can detect or negotiate the transmission speed of the network automatically. Please use CAT-5 cable to connect the Network Camera to a 100Mbps Fast Ethernet network switch or hub.
Micro SD Card Slot	The IP camera has a built-in micro SD card slot that accepts micro SD memory card for image / video event recording.
Audio Out	The loud speaker of the IP camera features voice alert and two-way audio.
Audio In	The IP camera that comes with a microphone.
GPIO	The 7-pin terminal block includes 4 input ports and 1 output port.

➤ **Terminal block for I/O connectors**

Pin	Function	Description
1	GND	Digital Input: Only one set is designed for this camera model. The internal device is also a photo-coupled electrical relay, and the external device can be simply an On/Off switch. Each set of On/Off switch can be connected as one trigger source. Digital Output: Each digital output pin to COM is a photo-coupled relay on Normal Open status. External device can directly connect to the terminals. However, the current that will go through the 2 nodes must not exceed 130mA. An external "Relay" can also be connected to the terminals as an implementation. In this case, current (or/and voltage) limitation is specified by the external relay.
2	DI	
3	GND	
4	DO_COM	
5	DO_NO2	
6	DO_COM	
7	DO_NO1	

3.4 ENVIRONMENTAL SPECIFICATIONS

Temperature

Operating	0 ~ 50 degrees C
Storage	-10 ~ 70 degrees C

Operating Humidity

Operating	20 ~ 80% (non-condensing)
Storage	20 ~ 90% (non-condensing)

3.5 ELECTRICAL SPECIFICATIONS

Device Input Voltage	12V DC / 2A
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Power Adapter	Power Input	100~240, 50-60Hz, 0.5A Switching Power Supply
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3.6 REGULATORY COMPLIANCE

FCC, CE, RoHS, WEEE

3.7 RELIABILITY

MTBF> 50,000hrs @ 25 degrees C

3.8 BASIC PACKAGING

- IP Camera Unit x 1
- Power Adapter x 1
- Quick Installation Guide x 1
- User's Manual CD x 1
- Wall Mount Kit x 1
- Mounting Label x 1
- GPIO Connector x 1

3.9 PACKAGE INFORMATION

Dimensions (W x D x H)	333 x 227 x 90 mm
Weight	910g
Carton Dimensions(W x D x H)	480 x 353 x 480mm
Carton Weight	10.5 kg
Carton Unit	10 pcs in one carton

APPENDIX A: DEFAULT SETTING

Default DHCP Client	On
Default IP Address	192.168.0.20 – if no DHCP exists in the network
Default Login User Name	admin
Default Login Password	admin
Search Tools	IPInstaller