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Networking & Communication

Product Specification

2 Mega-Pixel PoE Plus Speed Dome Internet Camera

ICA-HM620v2

Release 1.0

Change History:

Revision	Date	Author	Change List
Version 1.0	2012/08/27	Frank Tsai	Initial release

Author	Frank Tsai	Editor:	Frank Tsai
Reviewed by:	Jonas	Approved by:	Tom

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1. PRODUCT DESCRIPTION

Pan, tilt and zoom capabilities for wide area coverage

The PLANET ICA-HM620 Speed Dome Network Cameras are designed for the most demanding video surveillance applications, with outstanding, full frame rate video in resolutions up to HDTV 1080p and with optical zoom up to 20x. This camera supports H.264, and M-JPEG compression formats and delivers excellent picture quality in 1080p/720p resolutions at 30/60 frames per second (fps). Incorporating the progressive scan CMOS sensor from SONY, which is specially designed for surveillance applications, this camera provides high quality images and enable surveillance of a large area and great details when zooming in. With quick and reliable installation features, the cameras are ideal for stores, banks, warehouses, parking lots, airports and train stations, as well as city and perimeter surveillance.

Day & Night functionality

The ICA-HM620 features an automatic, removable infrared-cut filter, which enables the camera to provide color video when there is sufficient light, and black/white video in dark conditions. The camera is able to maintain clear images 24 hours a day.

Exceptional Image quality

Together with powerful image processing attributes like Wide Dynamic Range and 3-Dimension Noise Reduction technology, the camera is able to filter the intense backlight surrounding a subject and remove noises from video signal. The result is that an extremely clear and exquisite picture quality can be produced even under any challenging lighting conditions.

Advanced event management

The ICA-HM620 also supports a number of advanced features that give the camera increased flexibility and capabilities, including Auto-iris for improve the image quality to avoid over exposure, two-way audio function, microSD/SDHC card slot for local storage, and powerful zoom and high-speed, precision pan/tilt/zoom capabilities, the IP-66 protecting cover enable exceptional coverage of large areas and great details when zooming in.

Flexible installation and Power functionality

The ICA-HM620 incorporates Power over Ethernet Plus (IEEE 802.3at) / High PoE supplies power to the camera via the network, eliminating the need for power cables and reducing installation costs. The ICA-HM620 is ONVIF-compliant and therefore interoperable with other manufacturer's products, it's also included 64-CH central management software; the ICA-HM620 is indisputably the top choice for reliable and high performance surveillance.

2. PRODUCT FEATURES

➢ **Camera**

- 2.8" Sony Progressive Scan CMOS sensor built-in
- 20 x 8 zooming (20X optical, 8X digital) adjustment
- Auto White Balance
- Auto Electronic Shutter Time(1/30 ~ 1/10k sec)
- Automatic gain control (AGC) for image-intensified

➢ **Video & Audio**

- Multi-profile encoder supports H.264 and M-JPEG video compression simultaneously

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- High resolution quality pictures for day and night surveillance
- Up to 30fps for 1080P resolution and up to 60fps for 720P resolutions
- D1 / CIF Real-time resolutions (30fps)
- 2D/3D de-interlaced video image
- Image Enhancement with Wide Dynamic Range (WDR) / IR Cut Filter (ICR)
- 2-Way audio with built-in microphone input and linear audio output
- Motion Detection feature can monitor any suspicious movement in specific area

➢ **Network and Configuration**

- IPv4/v6 and UDP / TCP / HTTP / HTTPS protocols selectable
- DDNS and FTP uploading supports more alternatives in surveillance network
- 3GPP for 3G mobile remote applications
- Cam Viewer Three - Central management software supported
- Easy configuration and management via Windows-based utility or web interface

➢ **Operation**

- Built-in 802.3at Compliant PoE Plus
- 360 degree continuous PAN, Tilt (-10 ~ 190 degree)
- Preset speed can get 5~400 / sec, and manual speed 0.5 ~ 90 Degree / sec
- 256 presets, tour is based on presets, speed & park time of presets can be set
- Cruise line: 8 groups programmable lines, each cruise with 32 presets

➢ **Environment**

- 4 alarm in and 2 alarm out, and support alarm trigger.
- IP-66 outdoor classification with heater and fan for rigorous environment
- Fan and heater both belong to full-automatic intelligent control

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3. PRODUCT SPECIFICATION

3.1 MAIN COMPOMENT

Item	Description
CPU	ARM11
RAM	2GB
Flash	1GB
LAN	10/100Base-TX Ethernet
Sound Chipset	Stand-alone chipset

3.2 FUNCTIONAL SPECIFICATIONS

Model	ICA-HM620
Camera	
Image device	1/2.8" Sony Progressive Scan CMOS Sensor
Lens	f= 4.7~94mm, F1.6 Auto/Manual-iris/Focus Mechanical IR Cut Filter Angle of view (horizontal x vertical): H: 5.2 ~ 55.2 Degree V: 2.4 ~ 42.1 Degree
Min Illumination	0.04 Lux (B/W) / 0.3 Lux (color)
Effective Pixels	1920 x 1080 pixels
Pan/tilt/zoom	
Optical Zoom	20x
Digital Zoom	1~8x variable
Pan Degree	0 ~ 360 Degree continuous panning
Tilt Degree	-10 ~ 190 Degree
Manual Speed	0.5 ~ 90 Degree / s
Preset Point	256
Preset Accuracy	0.225 Degree
Preset Speed	5~400 Degree / s
Sequence	8
Auto Pan	4
Camera Cruise	8
Privacy Mask	16
Proportional Pan & Tilt	On/Off (Pan and tilt speed proportional to zoom ratio)
Resume after Power loss	Yes
Zone Title	16
Home Function	Preset, Sequence, Auto pan, Cruise
Auto Flip	Digital / Mechanical / Off
Digital Slow Shutter	On / Off
Image	
Video Compression	H.264 / M-JPEG

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Video Resolution	1080P/ 720P/ VGA/ D1
Frame Rate	30/25 fps @ 1080P / 60/50 fps @ 720P
Image Setting	Auto Electronic Shutter: 1/30 ~ 1/10k sec Auto White Balance: Auto/ Indoor/ Outdoor/ ATW AGC: Auto / Manual 3D Digital Noise reduction WDR Color, sharpness Mirror/Flip Privacy Masks Text, time and date overlay
Streaming	Simultaneously multi-profile streaming Streaming over UDP, TCP, or HTTP Controllable frame rate and bandwidth Constant and variable bit rate (MPEG4/H.264)
Audio	
Audio Streaming	Two-way Audio
Audio Compression	G.711 64kbps, G.726 32kbps, ADPCM, AAC
Microphone	External microphone input
Audio Output	Adjustable audio output gain
Network and Configuration	
Standard	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX
Protocol	IPv4, IPv6, TCP/IP, UDP, HTTP, HTTPS, SMTP, FTP, NTP, DNS, DDNS, DHCP, ARP, Bonjour, UPnP, RTSP, RTP, RTCP, IGMP, PPPoE, 3GPP, ICMP, Samba
Security	Password protection, IP address filtering, HTTPS encrypted data transmission, user access log
Users	20 clients on-line monitoring at the same time
System Integration	
Application Programming Interface	Open API for software integration ONVIF Compliant
Alarm Triggers	Intelligent video motion detection and external input
Alarm Events	File upload via FTP, Samba to NAS, SD card or email Notification via email, HTTP, and TCP External output activation Audio alerting output Pre- and post-alarm buffering
General	
Power Requirement	AC24V ± 10% (system & heater) IEEE 802.3at (system)
Power Consumption	65 W (with Heater)
Operating Temperature	-45 ~ 50 Degree C (-49 ~ 122 Degree F)
Operating Humidity	10 ~ 90% (non-condensing)
Weight (include LENS)	2.32kg
Dimension (W x D x H)	191.97 x 282.11 mm
Protection Class	IP-66 outdoor classification, Built-in Fan and Heater
Emission	CE, FCC
Connectors	10/100Mbps Ethernet, RJ-45 DC power jack Terminal block for 4 alarm input and 2 output External MIC input Audio out

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	Micro SD/SDHC card (Max 32GB, Class 10) Factory default reset

3.3 PHYSICAL SPECIFICATION

Dimension
Φ192 x 282 mm (Φx H)
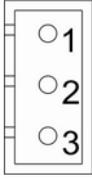
Weight

2.32kg

Switch Identification
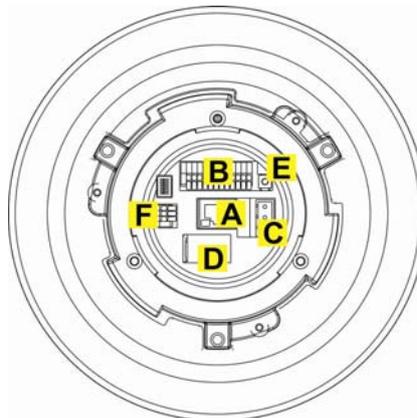
A	RJ-45 Connector
B	ALARM I/O
C	Power
D	Micro SD Card Slot
E	Factory Reset Button
F	Audio I/O

Power & Audio Connector Definition

Power Connector

Pin	Definition
1	AC 24_1
2	FG
3	AC 24_2

Audio Connector
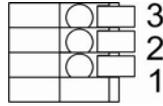
Pin	Definition
1	LINE_OUT
2	GND
3	LINE_IN

Alarm I/O Connector Definition
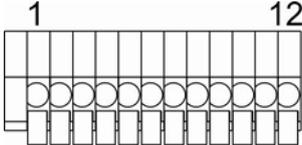
Pin	Definition
1	ALARM_OUT_NO_1
2	ALARM_OUT_NC_1
3	ALARM_OUT_COM_1
4	GND
5	ALARM_OUT_NO_2
6	ALARM_OUT_NC_2

Pin	Definition
7	ALARM_OUT_COM_2
8	GND
9	ALARM_IN_4
10	ALARM_IN_3
11	ALARM_IN_2
12	ALARM_IN_1

3.4 ENVIRONMENTAL SPECIFICATION

Operating Temperature

Outside:

-45 ~ 50 degree C

Enclosure Inside:

Heater & Fan on:

Fan: Operate all the time

Heater: -7 degree C on / 3 degree C off

Operating Humidity
10 ~ 90% (non-condensing)

3.5 REGULATORY COMPLIANCE
FCC, CE

3.6 BASIC PACKAGING
- Speed Dome Camera Unit x 1
- User's Manual CD-ROM x 1
- Quick Installation Guide x 1
- Terminal block x 3

- Optical Cover x 1

- M3/M5 Standard Screw x 4

- Water proof rubber x 1

- Lubricant x1

- Outdoor mount kit x 1

- Security Torx x 1

- Mini-pendant x 1

- Power Cord x 1