

EXTERIOR DOME PTZ CAMERA

- A. This product shall be manufactured by a firm whose quality system is in compliance with the ISO-9001. (This camera must not require a camera license)

- B. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.

- C. All systems and components shall have been thoroughly tested and proven in actual use.

- D. All systems and components shall be provided with comprehensive repair and spare parts replacement. The manufacturer on warranty and non-warranty items shall guarantee the spare parts and the repair.

- E. All systems and components must be in compliance with FCC, CE, UL and RoHs requirements.

- F. All materials furnished under this item shall be compliant with 802.3 Ethernet standards.

- A. The camera shall offer three video streams with up to 2MP resolution, utilizing a progressive scan CMOS imaging sensor.

- B. The camera shall offer video compression of H.264 and MJPEG. Dual H264 streams shall be supported with independent resolution, bit rate and frame rates for the main and sub streams.

- C. The camera shall provide true day night, low-light capabilities, with integrated IR cut filter, with sensitivity down to 0.05 lux in color and 0.005 lux in black/white.

- D. The camera shall be capable of performing firmware upgrades through a network using a software-based device utility or from the web interface.
- E. The camera shall be equipped with built-in password protection which is not dependent on a server.
- F. The camera shall provide the ability to take snapshot and record video clips from the web interface and store on the local computer.
- G. The camera shall support video motion detection with user defined areas and configurable sensitivity levels. In addition, the motion detection shall be supported by an arming schedule with surveillance center notification, email, ftp upload, and alarm output triggered as supported events.
- H. The camera's web interface shall permit settings to be exported to and imported from a configuration file via the web interface, API and camera manufacturer's client software.
- I. The camera shall conform to ONVIF and PSIA standards for integration with 3rd party video management systems (VMS). The camera may also support custom firmware for specific integration with a 3rd party VMS.
- J. The camera shall be compatible with a Video Management Software (VMS) package and Mobile Phone Application from the same manufacturer which is provided free of charge. The VMS shall not be a restricted use version of the manufacturer's full featured version.

1.3 POWER

A. Power Supply 24 V AC or Hi-PoE or PoE+

B. Power Consumption 24 V AC: 65W maximum

Hi-PoE: 40W maximum

PoE+: 25W maximum

1.4 CAMERA

A. Image Sensor 1/2.8" Progressive Scan CMOS

B. Effective Pixel 1920 (H) × 1080 (V)

C. Resolution 2MP

D. Min. Illumination Color: 0.4Lux @ (F1.6, 1/30 sec, 50 IRE, AGC On)

B/W: 0.03Lux @ (F1.6, 1/30 sec, 50IRE, AGC On)

Color: 0.05Lux @ (F1.6, 1/1 sec, 50 IRE, AGC On)

B/W: 0.005Lux @ (F1.6, 1/1 sec, 50IRE, AGC On)

E. White Balance Auto, Manual, ATW, Indoor, Outdoor, Daylight Lamp, Sodium Lamp

F. AGC Auto, Manual

G. S/N Ratio ≥ 50 dB

H. BLC On, Off

I. HLC On, Off

J. WDR On, Off

K. Defog On, Off

L. Shutter Time 1 ~ 1/30,000s

M. Day & Night IR Cut Filter

N. Digital Zoom 16x

O. Privacy Mask 24 privacy masks programmable; optional multiple colors and

mosaics in irregular shape

P. Electronic Shutter Range 1/1 sec ~1/30,000 sec

Q. Digital Slow shutter Yes

R. Image settings Saturation, brightness, contrast, sharpness

S. Image rotation Mirror(center, off)

T. Noise Reduction 3D, selectable level (1-100)

U. On screen Display Title (32 characters), Date, Time; User defined location

V. OSD Display Modes Transparent, non-transparent; flashing, non-flashing

1.5 VIDEO&AUDIO SPECIFICATIONS

A. Video Compression H.264, MJPEG, MPEG4

B. Audio Compression G.711ulaw/G.711alaw/G.726/MP2L2

C. Three Stream Yes

D. Resolutions supported Main Stream: 1920 × 1080, 1280 × 960, 1280 × 720

Sub Stream: 704x576, 352x288, 176x144

Third Stream: 1920 × 1080, 1280 × 960, 1280 × 720,

704x576, 352x288, 176x144

E. Video Bit rate 32 Kbps ~16 Mbps

F. Rate Control Constant, Variable

G. ROI Encoding Support 24 areas with adjustable levels

H. H.264 profiles High, Main, Base

I. Max. Frame Rate 25fps (1920 x 1080), 30fps (1920 x 1080)

J. Users

1. Unicast Up to 10 simultaneous users depending on resolution settings

2. Multicast Unlimited H.264

K. Security Access Password protected

L. Software Interface Web browser view and remote client.

1.6 NETWORK

- A. Ethernet RJ-45 10M/100M self-adaptive
- B. Alarm trigger Motion detection, Audio Exception Detection, Dynamic analysis, Tampering alarm, Network disconnect, IP address conflict, Storage exception
- C. Protocols IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
- D. Security User authentication, Host authentication, Watermark, IP address filtering
- E. System Compatibility ONVIF, PSIA
- F. RS485 protocol Pelco-P, Pelco-D, self-adaptive

1.7 CONNECTORS

- A. Communication interface 1 RJ45 10 M / 100 M Ethernet port
- B. RS-485 interface Dry Contact
- C. Analog Output 1Vp-p Composite Output (75ohm/ BNC)
- D. Alarm Input Dry Contact
- E. Alarm Output Dry Contact
- F. SD/SDHC slot Up to 32GB; Manual REC / alarm REC

1.8 WEB BROWSER REQUIREMENTS

- A. Operating System PC (Intel® Core® 2 Duo microprocessor, 2.6 GHz) with Microsoft® Windows® XP, Windows Vista®, or Windows® 7
- B. Web User Interface DirectX for Windows XP, Windows Vista, Windows 7
- C. RAM 2 GB
- D. Ethernet Card 100 Mbps
- E. Web Browser Internet Explorer® 7.0 or later, Firefox, Chrome
- F. Screen Resolution 1024 x 768 pixels or higher, 16- or 32-bit pixel color resolution

1.9 LENS

- A. Focus Model Auto, Semiautomatic, Manual
- B. Focal Length 4.7 ~94mm, 20x
- C. Zoom Speed Approx.2.7s (Optical Wide-Tele)
- D. Angle of View 58.3° ~ 3.2° (Wide-Tele)
- E. Min. Working Distance 10 ~ 1,500mm (Wide-Tele)
- F. Aperture Range F1.6 – F3.5

1.10 PAN AND TILT

- A. Pan Range 360° endless
- B. Pan Speed Pan Manual Speed: 0.1° -300°/s
. Pan Preset Speed: 540°/s
- C. Tilt Range -5° ~ 90° (Auto Flip)
- D. Tilt Speed Tilt Manual Speed: 0.1° ~ 240°/s
Tilt Preset Speed: 400°/s
- E. Proportional Zoom Rotation speed can be adjusted automatically according to zoom multiples
- F. Number of Preset 256
- G. Patrol 8 patrols, up to 32 presets per patrol
- H. Pattern 4 patterns, with the recording time not less than 10 minutes per pattern
- I. Power Loss Recovery Support
- J. Park Action Preset, Patrol, Pattern, Pan scan, Tilt scan, Random scan, Frame scan, Panorama scan
- K. PTZ Position Display On, Off
- L. Freeze Frame Support
- M. Smart Tracking Yes

1.11 ALARM

- A. Alarm Input 7

- B. Alarm Output 2 relay outputs, alarm response actions option
- C. Alarm Trigger Motion detection, Audio exception detection, Dynamic analysis, Tampering alarm, Network disconnect, IP address conflict, Storage exception
- D. Alarm Actions Preset, Patrol, Pattern, Pan scan, Tilt scan, Random scan, Frame scan/Panorama scan, Relay output

1.12 INPUT/OUTPUT

- A. Monitor Output 1.0 V [p-p] / 75 ohm, NTSC (or PAL) composite, BNC
- B. Audio Input Mic in/Line in
Line input: 2-2.4 V [p-p]; output impedance: 1 Kohm, $\pm 10\%$
- C. Audio Output Line level, impedance: 600 ohm

1.13 CLIENT GUI

- A. Camera Control Pan/Tilt, Zoom, Focus, Click centering, Drag zoom, Iris, Preset position call and program, Auto mode.
- B. OSD Up to 32 characters
- C. Date & Time Display Time: Week: Date, 6 formats on the Client
- D. Reading Patrol Message Display and reading of preset message contained in each patrol via client software
- E. Menu Language English, Chinese

1.14 PHYSICAL SPECIFICATIONS

- A. Dimension (Dia.x H) $\Phi 220 \times 325.5 \text{mm}$ ($\Phi 8.66'' \times 12.81''$)(Outdoor)
- B. Weight (approx.) 5 kg (11.02 lbs)

1.15 ENVIRONMENTAL SPECIFICATIONS

- A. Operating Temperature 24 VAC: -40°C - 65°C (-40°F - 149°F)(outdoor dome)
Hi-PoE: -30°C - 65°C (-22°F - 149°F)(outdoor dome)
PoE+: -20°C - 65°C (-4°F - 149°F)(outdoor dome)
- B. Operating Humidity 90% or less

1.16 CERTIFICATIONS AND RATINGS

A. Regulatory

1. IEC/EN 61000
2. IEC/EN 55022
3. IEC/EN 55024
4. IEC /EN60950-1
5. FCC Part 15, Class b
6. UL/cUL 60950-1
7. RoHS

B. Ratings

1. Weatherproof Rating IP66
2. Electrical Protection TVS 4,000V lightning protection, surge protection and voltage transient protection