

# NPT A8400

4MP 30x PTZ Network Camera



- · 1/3" 4Megapixel CMOS
- · Powerful 30x optical zoom
- · H.265 Encoding
- Max. 25/30fps@4M/3M, 25/30/50/60fps@1080P
- · Auto-tracking and IVS
- · Support PoE+
- · IP67, IK10













### **System Overview**

Pro series adopts powerful DSP and image sensor, which can offer great image performance. It supports excellent optical zoom with autofocus and provides highly detailed zoomed-in views. With upgraded smart H.265 encoding technology, this series achieves high-efficient video stream compression, and enhance the monitoring system by saving network bandwidth and storage capacity. Suitable for both indoor and outdoor environment, this series enables 360° endless pan for wide area coverage. The pro series offers industry-leading IR capability of up to 200m.

#### **Functions**

# Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

## **Auto-tracking**

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

#### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

#### **Environmental**

Eyemax cameras operate in extreme temperature environments, rated for use in temperatures from -40 °C to +60 °C (-40 °F to +140°F) with 95% humidity. The camera complies with the IK10 Vandal Resistance impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

#### **Protection**

The camera allows for  $\pm 10\%$  input voltage tolerance, suitable for the unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

# Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) and PSIA (Physical Security Interoperability Alliance) specifications, ensuring interoperability between network video products regardless of manufacturer.



| Paragram   1/2 CM     | Technical Specification  |   |   |              | Video              |                           |   |
|--|--|---|---|--------------|--------------------|---------------------------|---|
| Part      | Camera   |   |   |              | Compression        | H.265+/H.265/H.264+/H.264 |   |
| Render   | Image Sensor   | 1/3"  | 1/3" CMOS   |              |                    | Streaming Capability      | 3 Streams                                   |
| Securing System  |  |   |   |              |                    | Resolution                | 1080)/720P(1280×720)/D1(704×576/704×480)/   |
| Minimum   Mummaltation   More   Marker   Marke   |  |   |   |              |                    |                           |   |
| Minimum   Min    | 0 1  |   |   | Frame Rate   |                    |                           |   |
| No     No   No   No   No   No   No   |  |   |   |              |                    |                           |   |
| ## Rib Distance  |  | umination Color: 0.05Lux@F1.6; B/W: 0.005Lux@F1.6 |   |              |                    |                           |   |
| Bit Nate   | S/N Ratio  |   | More than 55dB  |              |                    | Bit Rate Control          | CBR/VBR                                     |
| Bar-Night  | IR Distance  | N/A   | N/A   |              |                    | Bit Rate                  | H.265/H.264: 448K ~ 8192Kbps                |
| Back   First   First   Back    | IR On/Off Control  | IR On/Off Control N/A                             |   |              |                    | Day/Night                 | Auto(ICR) / Color / B/W                     |
| Max. Aperture  | IR LEDs  | N/A   |   |              |                    | Backlight Compensation    | BLC / HLC / WDR (120dB)                     |
| Max. Aperture  | Lens   |   |   |              |                    | White Balance             | Auto,ATW,Indoor,Outdoor,Manual              |
| Noise Reduction   Ultra DNR (2D/3D)  | Focal Length   | 4.5mm~135mm                                       |   |              |                    | Gain Control              | Auto / Manual                               |
| Optical Zoom   | Max. Aperture F1.6 ~ F4.4  |   |   |              | Noise Reduction    | Ultra DNR (2D/3D)         |   |
| Region of Interest   Support   | Angle of View  | H: 60   | H: 60° ~ 2.2°   |              |                    | Motion Detetion           | Support                                     |
| Close Focus Distance   100mm* 1000mm   100mm   | Optical Zoom 30x   |   |   |              | Region of Interest | Support                   |   |
| Close Focus Distance 100mm* 100mm* 100mm Defog Support  DRID Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to the RoE6764 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify Privacy Masking Up to 24 areas  Detect Observe Recognize Identify Privacy Masking Up to 24 areas  Audio  2700m(8858ft) 1080m(3543ft) 540m(1772ft) 270m(886ft) Compression G.711a/G.711Mu/AAC/G.722 / G.726/G.729/ MPEG2-12  Pan/Tilt Range Pan: 0.1* "350" /s; Tilt: 0.1* "250" /s  Preset Speed Pan: 5.01* "350" /s; Tilt: 500" /s  Preset Speed Pan: 5.00" /s; Tilt: 5.00" /s  Preset Speed Pan: 5.00" /s; Tilt:  | Focus Control Auto/Manual  |   |   |              | _                  | Support                   |   |
| *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify Respectively.  Detect Observe Recognize Identify Respectively.  Detect Observe Recognize Identify Respectively.  Power up Action Specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Pan 101 * 360" endless; Tilt: 0" * 90", auto flip 180"  Pan: 0" * 360" endless; Tilt: 0" * 90", auto flip 180"  Pan: 01 * 360" endless; Tilt: 0" * 90", auto flip 180"  Preset Speed Pan: 01 * 350" /s; Tilt: 01" * 250" /s  Preset Speed Pan: 500" /s; Tilt: 500" /s  Preset Speed Setup Pan: 500" /s; Tilt: 500" /s  Prover up Action Auto restore to previous PTZ and lens status after power failure  Idle Motion Activate Preset/ Scan/Tour/ Pattern if there is no command in the specified period  Protocol DH-SD Management Software Smart PSS, DSS  Intelligence Support  Management Software Smart PSS, DSS  Disporte, Intusion, Abandoned/Missing, Face Detection Certifications  Detection Certifications  Detection Certifications  Displace Certifications  | Close Focus Distance 100mm~ 1000m  |   | mm~ 1000mm  |              |                    |                           |   |
| *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect  Observe Recognize Identify  2700m(8858th) 1080m(3543ft) 540m(1772ft) 270m(886ft)  Prover Up Action  Pan: O* ~ 360* endless; Tilt: O* ~ 90*, auto flip 180*  Ethernet R. H-45 (10/1008ase-T)  Preset Speed Pan: O.1* ~ 350* /s; Tilt: O.1* ~ 250* /s  Preset Speed Pan: O.1* ~ 350* /s; Tilt: O.1* ~ 250* /s  Presets 300  Protocol Interoperability ONVIF, PSIA, CGI  Streaming Method Unicast / Multicast  Speed Setup Human-oriented focal Length/ speed adaptation  Power up Action Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period  Idle Motion  Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period  Auto Tracking Support  Tipwire, Intrusion, Abandoned/Missing, Face  Privacy Masking Privacy Masking  Privacy Masking  Privacy Masking  Privacy Masking  Privacy Masking  Puto 24 areas  Putos  Compression  G.711a/G.711mu/AAC/G.722 / G.726/G.729/ MPEG2-12  Pretwork  Ethernet R. H-45 (10/1008ase-T)  Network  Ethernet R. R-45 (10/1008ase-T)  Protocol  Protocol Protocol  Interoperability ONVIF, PSIA, CGI  Streaming Method Unicast / Multicast  Max. User Access  20 users  NAS (Network Attached Storage).tocal PC for instant recording, Micro SD card 128GB  Idle Motion Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period  Management Software  Smart PSs. DSS  Intelligence  Tripwire, Intrusion, Abandoned/Missing, Face  Detection  Fig. Certifications  CE: ENSS032/ENS50130-4  FCC: Part15 subpart8, ANSI C63.4-2014  | DORI Distance  |   |   |              |                    |                           |   |
| sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize and Identify and Identify respectively.  POPOM (8858ft) 1080m(3543ft) 540m(1772ft) 270m(886ft) Compression G.711a/G.711Mu/AAC/G.722 / G.726/G.729/MPEG2-L2  PAIR (711 Range Pair: 0.1° ~360° endless; Tilt: 0° ~90°, auto flip 180° Ethernet RJ-45 (10/1008ase-T)  Manual Control Speed Pair: 0.1° ~350° /s; Tilt: 0.1° ~250° /s  Preset Speed Pair: 0.1° ~350° /s; Tilt: 501° ~250° /s  Preset Speed Pair: 0.1° ~350° /s; Tilt: 501° ~250° /s  Presets 300 Interoperability ONVIF, PSIA, CGI  PTZ Mode 5 Pattern, 8 Tour, Auto Pan ,Auto Scan Streaming Method Unicast / Multicast  Speed Setup Human-oriented focal Length / speed adaptation  Max. User Access 20 users  Power up Action Auto restore to previous PTZ and lens status after power failure  Idle Motion Command in the specified period Web Viewer IE, Chrome, Firefox, Safari  Protocol DH-SD Support Support Smart PSo, OS  Intelligence Support Support Smart Phone IOS, Android  Auto Tracking Support Certifications Certifications Certifications  Tripwire, Intrusion, Abandoned/Missing, Face Detection  Potentian Command in the Specified Pool Operation of Certifications Certifications Certifications  Certifications Certifications Certifications Proceed Page 104 PC Certifications  |  |   |   |              | -                  |                           |   |
| Detect Observe Recognize Identify Audio  2700m(8858ft) 1080m(3543ft) 540m(1772ft) 270m(886ft) Compression G.711a/G.711Mu/AAC/G.722 / G.726/G.729/ PTZ  Pan/Tilt Range Pan: 0* ~ 360* endless; Tilt: 0* ~ 90°, auto flip 180*  Manual Control Speed Pan: 0.1* ~ 350* /s; Tilt: 0.1* ~ 250* /s  Preset Speed Pan: 500* /s; Tilt: 500* /s  Preset Speed Pan: 500* /s; Tilt: 500* /s  Presets 300 Interoperability ONVIF, PSIA, CGI  PTZ Mode 5 Pattern, 8 Tour, Auto Pan ,Auto Scan Streaming Method Unicast / Multicast  Speed Setup Human-oriented focal Length/ speed adaptation Max. User Access 20 users  Power up Action Auto restore to previous PTZ and lens status after power failure power failure  Idle Motion Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period Web Viewer IE, Chrome, Firefox, Safari  Manual Control Speed Support  Tripwire, Intrusion, Abandoned/Missing, Face Preset/ Scan/ Tourly, Data Certifications Certifications  Protocol DH-SD Tripwire, Intrusion, Abandoned/Missing, Face Certifications  Certifications  Protocol Preset Scan/ Tourly Speed Adaption Max. User Access Smart PSS, DSS  Smart Phone Certifications  Certifications  Certifications  Certifications  Protocol Preset Scan/ Tourly Pattern of the Preset Scan/ Tourly Pattern of Preset Scan/ Preset Scan/ Preset Scan/ Preset Scan/ Preset S | sensor specification and lab test result according to EN 62676-4 which defines the |   |   |              |                    |                           |   |
| 2700m(8858ft) 1080m(3543ft) 540m(1772ft) 270m(886ft)  Pan/Tilt Range Pan: 0° ~360° endless; Tilt: 0° ~90°, auto flip 180° Ethernet RJ-45 (10/100Base-T)  Manual Control Speed Pan: 0.1° ~350° /s; Tilt: 0.1° ~250° /s  Preset Speed Pan: 500° /s; Tilt: 500° /s  Preset Speed Pan: 500° /s; Tilt: 500° /s  Preset Speed Pan: 500° /s; Tilt: 500° /s  Preset Speed Setup Interoperability OnVir, PSIA, CGI  PTZ Mode S Pattern, 8 Tour, Auto Pan ,Auto Scan Streaming Method Unicast / Multicast  Speed Setup Auto restore to previous PTZ and lens status after power failure Edge Storage NAS (Network Attached Storage), Local PC for instant recording, Micro SD card 128GB  Idle Motion Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period Web Viewer IE, Chrome, Firefox, Safari  Management Software Smart PSS, DSS  Intelligence Support Certifications  Protocol PTZ Mone Support Certifications Certifications  Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period Certifications  Protocol PH-SD Smart Phone IOS, Android  |  |   |   |              |                    |                           | Up to 24 areas                              |
| PTZ Pan/Tilt Range Pan: 0* ~ 360* endless; Tilt: 0* ~ 90*, auto flip 180* Ethernet RJ-45 (10/100Base-T)  Manual Control Speed Pan: 0.1* ~ 350* /s; Tilt: 0.1* ~ 250* /s Preset Speed Pan: 500* /s; Tilt: 500* /s Presets 300 Interoperability ONVIF, PSIA, CGI PTZ Mode 5 Pattern, 8 Tour, Auto Pan ,Auto Scan Streaming Method Unicast / Multicast  Speed Setup Human-oriented focal Length/ speed adaptation Max. User Access 20 users  Power up Action Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period DH-SD Management Software Smart PSS, DSS  Intelligence  Compression MPEG2-L2  Network  RI-45 (10/100Base-T)  RJ-49/IPV6,HTTP,HTTPS,SSL,TCP/IP, UDP,UPPR, IPV6/IPV6,DNS,PTPP, IPF Filter,QOS,Bonjour,802.1x  RIPV4/IPV6,HTTP,HTTPS,SSL,TCP/IP, UDP,UPPR, IPV6/IPV6,DNS,PTPP, IPF Filter,QOS,Bonjour,802.1x  Interoperability ONVIF, PSIA, CGI  Unicast / Multicast  Unicast / Multicast  Values Access 20 users  RAS (Network Attached Storage),Local PC for instant recording, Micro SD card 128GB  Web Viewer IE, Chrome, Firefox, Safari  Web Viewer Smart PSS, DSS  Intelligence  Auto Tracking Support  Certifications  CE: ENS5032/ENS5024/ENS50130-4  FCC: Part15 subpartB,ANSI C63.4-2014   |  |   |   |              |                    | Audio                     | 0.744 /0.7444 /445/0.755 / 0.755/0.755/     |
| Pan/Tilt Range Pan: 01° ~ 360° endless; Tilt: 01° ~ 90°, auto flip 180°  Manual Control Speed Pan: 0.1° ~ 350° /s; Tilt: 0.1° ~ 250° /s  Preset Speed Pan: 500° /s; Tilt: 500° /s  Preset Speed Pan: 500° /s; Tilt: 500° /s  Presets  300 Interoperability ONVIF, PSIA, CGI  PTZ Mode S Pattern, 8 Tour, Auto Pan ,Auto Scan Streaming Method Unicast / Multicast  Speed Setup Human-oriented focal Length / speed adaptation Auto restore to previous PTZ and lens status after power failure  Power up Action Activate Preset / Scan/ Tour/ Pattern if there is no command in the specified period  Management Software  Auto Tracking Support  Network  Ethernet RJ-45 (10/1008ase-T)  Ethernet RJ-46 (10/1008ase-T) RJ-46 (10/1008ase) RJ-46 (10 |  | 1080111(334311)                                   | 340111(177211)  | 27011(88011) |                    | Compression               |   |
| Manual Control Speed Pan: 0.1° ~350° /s; Tilt: 0.1° ~250° /s  Preset Speed Pan: 500° /s; Tilt: 500° /s  Presets Speed Pan: 500° /s; Tilt: 500° /s  Protocol  |  | Deve  | Dani 0° × 200° and loss Tilti 0° × 00° auto flin 100° |              |                    | Network                   |   |
| Preset Speed Pan: 500° /s; Tilt: 500° /s Protocol Protoco | _  |   |   |              |                    | Ethernet                  | RJ-45 (10/100Base-T)                        |
| Presets 300 Interoperability ONVIF, PSIA, CGI  PTZ Mode 5 Pattern, 8 Tour, Auto Pan ,Auto Scan Streaming Method Unicast / Multicast  Speed Setup Human-oriented focal Length/ speed adaptation Max. User Access 20 users  Power up Action Auto restore to previous PTZ and lens status after power failure Edge Storage NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 128GB  Idle Motion Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period Web Viewer IE, Chrome, Firefox, Safari  Protocol DH-SD Management Software Smart PSS, DSS  Intelligence Support Certifications  IVS Tripwire, Intrusion, Abandoned/Missing, Face Detection Certifications  Certifications Certifications  Certifications   |  |   |   |              |                    | Protocol                  | ICMP,IGMP,SNMP,RTSP,RTP, SMTP, NTP,DHCP,    |
| PTZ Mode 5 Pattern, 8 Tour, Auto Pan ,Auto Scan Streaming Method Unicast / Multicast  Speed Setup Human-oriented focal Length/ speed adaptation Max. User Access 20 users  Power up Action Auto restore to previous PTZ and lens status after power failure Edge Storage NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 128GB  Idle Motion Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period Web Viewer IE, Chrome, Firefox, Safari  Protocol DH-SD Management Software Smart PSS, DSS  Intelligence Support Certifications  Tripwire, Intrusion, Abandoned/Missing, Face Detection Certifications  Certifications CE: ENS5032/ENS5024/ENS0130-4 FCC: Part15 subpartB, ANSI C63.4-2014   | Presets  |   | 300   |              |                    | Interoperability          |   |
| Speed Setup Human-oriented focal Length/ speed adaptation Max. User Access 20 users  Auto restore to previous PTZ and lens status after power failure  Edge Storage NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 128GB  Idle Motion Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period  Web Viewer IE, Chrome, Firefox, Safari  Protocol DH-SD Management Software Smart PSS, DSS  Intelligence Auto Tracking Support Certifications  Tripwire, Intrusion, Abandoned/Missing, Face Detection Certifications Certifications CE: ENS5032/ENS5024/ENS0130-4 FCC: Part15 subpartB, ANSI C63.4- 2014   | PTZ Mode   |   | 5 Pattern, 8 Tour, Auto Pan ,Auto Scan                |              |                    | ,                         |   |
| Power up Action Auto restore to previous PTZ and lens status after power failure Edge Storage NAS (Network Attached Storage), Local PC for instant recording, Micro SD card 128GB  Idle Motion Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period Web Viewer IE, Chrome, Firefox, Safari  Protocol DH-SD Management Software Smart PSS, DSS  Intelligence Smart Phone IOS, Android  Auto Tracking Support Certifications  Tripwire, Intrusion, Abandoned/Missing, Face Detection Detection Certifications  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  | Speed Setup  |   | Human-oriented focal Length/ speed adaptation         |              |                    | -                         |   |
| Protocol  DH-SD  Management Software  Smart PSS, DSS  Intelligence  Auto Tracking  Support  Certifications  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4-2014   |  |   |   |              |                    |                           | NAS (Network Attached Storage),Local PC for |
| Intelligence  Auto Tracking  Support  Certifications  Tripwire, Intrusion, Abandoned/Missing, Face Detection  Certifications  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  | Idle Motion  |   |   |              |                    | Web Viewer                |   |
| Auto Tracking  Support  Certifications  Tripwire, Intrusion, Abandoned/Missing, Face Detection  Certifications  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  | Protocol   |   | DH-SD   |              |                    | Management Software       | Smart PSS, DSS                              |
| Tripwire, Intrusion, Abandoned/Missing, Face  Optication  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  | Intelligence   |   |   |              |                    | Smart Phone               | IOS, Android                                |
| IVS Inpute, intrusion, Abandoned/wissing, Face Certifications FCC: Part15 subpartB,ANSI C63.4- 2014  | Auto Tracking  |   | Support   |              |                    | Certifications            |   |
|  | IVS  |   |   |              |                    | Certifications            | FCC: Part15 subpartB,ANSI C63.4- 2014       |

# Interface

| Video Interface | N/A |
|-----------------|-----|
| Audio Interface | 1/1 |
| RS485           | N/A |
| Alarm I/O       | 2/1 |

# Electrical

| Power Supply      | AC24V/1.5A(±10%), PoE+(802.3at) |
|-------------------|---------------------------------|
| Power Consumption | 13W,23W (Heater on)             |

#### Environmental

| Operating Conditions | -40°C ~ 60°C (-40°F ~ +140°F) / Less than 90% RH |
|----------------------|--|
| Ingress Protection   | IP67   |
| Vandal Resistance    | IK10   |

## Construction

| Casing       | Metal              |
|--------------|--------------------|
| Dimensions   | Ф186(mm) x 253(mm) |
| Net Weight   | 2.5kg(5.51lb)      |
| Gross Weight | 4.5kg(9.92lb)      |

# Accessories

Included:







Wall Mount

Mount Adapter

Power Supply

# Dimensions (mm)

