# ZENON-2s-PO2-IXV-X25

2MP 25x Starlight IR Network Positioning System





- 1/2.8" 2Megapixel STARVIS™ CMOS
- · Powerful 25x optical zoom
- · Starlight technology
- Max. 50/60fps@1080P
- · Auto-tracking and IVS
- · Support PoE+
- · IR distance up to 150m
- · IP67, IK10















## **System Overview**

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, this camera provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. Together with infrared illumination and Starlight technology, the camera is the perfect solution for dark, lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality in variable lighting conditions during the day, and True WDR for applications with direct sunlight or glare.

## **Functions**

#### Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

## **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.

#### **PFA Technology**

PFA technology has introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

#### **Environmental**

This camera can operate in extreme temperature environments, rated for use in temperatures from -40°C  $^{\sim}$  70°C (-40°F  $^{\sim}$  +158°F) with 95% humidity. The camera complies with the IK10 Vandal Resistance impact rating. 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 8KV lightning rating to provide effective protection for both the camera and its structure against lightning.

#### Interoperability

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



| Technical Specification               |                      |   |                  | Auto Tracking               | Support                                       |   |
|---------------------------------------|----------------------|---|------------------|-----------------------------|---|---|
| Camera                                |                      |   |                  | 1                           | IVS   | Tripwire, Intrusion, Abandoned/Missing  |
| Image Sensor                          | 1/2.8                | " STARVIS™ CMOS   |                  |                             | Advanced Intelligent Functions                | Face Detection, Heat Map  |
| Effective Pixels                      | 1920                 | 1920(H) x 1080(V), 2 Megapixels   |                  |                             | Video   |   |
| RAM/ROM                               |                      |   |                  |                             | Compression                                   | H.265+/H.265/H.264+/H.264   |
| Scanning System Progressive           |                      | essive  |                  |                             | Streaming Capability                          | 3 Streams   |
| Electronic Shutter Speed 1/1s~1/30,00 |                      | 1/30,000s   | 30,000s          |                             | Resolution                                    | 1080P(1920×1080)/1.3M(1280×960)/720P(1280×  |
| Color: 0.005Lux@F1.6; B/W: 0          |                      | 0.0005Lux@F1.6;   |                  |                             | 720)/D1(704×576/704×480)/CIF(352×288/352×240) |   |
|                                       |                      | OLux@F1.6 (IR on)  More than 55dB   |                  |                             | Frame Rate                                    | Main stream: 1080P/1.3M/720P(1~50/60fps)  |
|                                       |                      | Distance up to 150m (492ft)   |                  |                             |   | Sub stream1: D1/CIF(1 ~ 25/30fps)  Sub stream2: 1080P/1.3M/720P/D1/CIF                        |
| IR On/Off Control                     |                      |   |                  |                             |   | (1~25/30fps)  |
| IR LEDs                               |                      |   |                  |                             | Bit Rate Control                              | CBR/VBR   |
| Lens                                  |                      |   |                  |                             | Bit Rate                                      | H.265/H.264: 448K ~ 8192Kbps  |
|                                       |                      | m~120mm   |                  |                             | Day/Night                                     | Auto(ICR) / Color / B/W   |
| Focal Length  May Aperture            |                      |   |                  |                             | Backlight Compensation                        | BLC / HLC / WDR (120dB)   |
|                                       |                      | 1.6 ~ F4.4  |                  |                             | White Balance                                 | Auto, ATW, Indoor, Outdoor, Manual  |
|                                       |                      | H: 62.8° ~ 2.6°   |                  |                             | Gain Control                                  | Auto / Manual   |
| Optical Zoom                          | 25x                  |   |                  |                             | Noise Reduction                               | Ultra DNR (2D/3D)   |
| Focus Control                         |                      | 'Manual   |                  |                             | Motion Detection                              | Support   |
| Close Focus Distance                  | 100m                 | 100mm~ 1500mm   |                  |                             | Region of Interest                            | Support   |
| DORI Distance                         | . "                  |   |                  |                             | Electronic Image Stabilization (EIS)          | Support   |
| pinpoint the right cam                | nera for your needs. | eximity" of distance whi<br>The DORI distance is cal<br>cording to EN 62676-4 w   | culated based on |                             | Defog   | Support   |
| criteria for Detect, Ob               | serve, Recognize and | nize and Identify respectively.   |                  |                             | Digital Zoom                                  | 16x   |
| Detect Observe                        |                      | Recognize   | Identify         |                             | Flip  | 180°  |
| 1613m(5292ft)                         | 646m(2119ft)         | 323m(1060ft)  | 161m(528ft)      |                             | Privacy Masking                               | Up to 24 areas  |
| PTZ                                   |                      |   |                  |                             | Audio   |   |
| Pan/Tilt Range                        |                      | Pan: $0^{\circ}$ ~ 360° endless; Tilt: $-90^{\circ}$ ~ $90^{\circ}$ , effective angle: $-51^{\circ}$ ~ $90^{\circ}$ , auto flip $180^{\circ}$ |                  |                             | Compression                                   | G.711a/G.711Mu/AAC/G.722 / G.726/G.729/<br>MPEG2-L2   |
| Manual Control Speed P                |                      | Pan: 0.1° ~120° /s; Tilt: 0.1° ~75° /s  |                  |                             | Network                                       |   |
| Preset Speed P.                       |                      | Pan: 120° /s; Tilt: 75° /s  |                  |                             | Ethernet                                      | RJ-45 (10Base-T/100Base-TX)   |
|                                       |                      | 300<br>5 Pattern, 8 Tour, Auto Pan ,Auto Scan   |                  |                             | Protocol                                      | IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SMMP, RTSP, RTP, SMTP, NTP, DHCP, |
| Speed Setup H                         |                      | Human-oriented focal Length/ speed adaptation   |                  |                             | Interoperability                              | DNS,PPPOE,DDNS,FTP, IP Filter,QoS,Bonjour,802.1x ONVIF Profile S&G, API                       |
| Power up Action                       |                      | Auto restore to previous PTZ and lens status after power failure  |                  |                             | Streaming Method                              | Unicast / Multicast   |
| Idle Motion                           |                      | Activate Preset/ Scan/ Tour/ Pattern if there is no   |                  |                             | Max. User Access                              | 20 users  |
|                                       |                      | command in the specified period  SD   |                  |                             | Edge Storage                                  | NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 256GB            |
| Intelligence                          |                      |   | Web Viewer       | IE, Chrome, Firefox, Safari |   |   |
|                                       |                      | Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly               |                  |                             | Management Software                           | Smart PSS, DSS, DMSS  |
| Event Trigger                         |                      |   |                  |                             | Smart Phone                                   | IOS, Android  |

## Certifications

|                | CE: EN55032/EN55024/EN50130-4          |
|----------------|--|
| Certifications | FCC: Part15 subpartB, ANSI C63.4-2014  |
|                | UL: UL60950-1+CAN/CSA C22.2,No.60950-1 |

## Interface

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

## Electrical

| Power Supply      | DC12V/4A, PoE+(802.3at) |
|-------------------|-------------------------|
| Power Consumption | 22W (IR on)             |

## Environmental

| Operating Conditions | -40°C $^{\sim}$ 70°C (-40°F $^{\sim}$ +158°F) / Less than 95% RH |
|----------------------|--|
| Ingress Protection   | IP67   |
| Vandal Resistance    | IK10   |

## Construction

| Casing       | Metal                            |
|--------------|----------------------------------|
| Dimensions   | Ф291.5(mm) x 161(mm) x 153.4(mm) |
| Net Weight   | 3.6kg(7.94lb)                    |
| Gross Weight | 6.35kg(14.00lb)                  |

## Accessories

## Included:







DC12V/4A Power Adapter

## Optional:



MNT-730W Wall Mount

# Dimensions (mm)



