# VIKYLIN

## VD-SD4825X
## 8MP 25x Starlight IR WizSense Network PTZ Camera

- · 1/2.8" 8Megapixel STARVIS™ CMOS
- · Powerful 25x optical zoom
- · Starlight technology
- · IR distance up to 100 m
- · Perimeter protection
- · Face detection
- · IP66

Launched by Technology, WizSense is a series of AI products and solutions that adopts independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

### System Overview

PTZ WizSense network camera adopts advanced CNN deep learning algorithms to support Perimeter Protection with high accuracy. This camera possesses wide monitor range, PFA algorithm that can always present a clear, focused image while zooming. The camera has very excellent low light performance due to adopting the latest starlight technology. The camera is equipped with smooth control, high quality image and good protection, which makes it meet most of the requirements of video surveillance applications.

### Functions

### Functions

#### Starlight Technology
For challenging low-light conditions,Starlight Ultra-low Light Technology offers the best in light sensitivity, capturing color in vivid detail, even in lighting as low as 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, producing clear images in dark environments.

#### Perimeter Protection
Automatically filters out false alarms caused by animals, rustling leaves, bright lights, and more, and uses secondary recognition during target detection to improve alarm accuracy.

#### Face Detection
Supports 6 attributes and 8 expressions: Gender, age, glasses, mask, beard and expressions (anger, sadness, disgust, fear, surprise, calm, happiness, and confusion). It also supports face cutout settings: Face, and single inch photo. Three snapshot methods are also featured: Real-time snapshot, priority snapshot, and quality priority.

8Mp | Starlight | Perimeter Protection | Face Detection | IP66

#### PFA Technology
PFA technology has introduced new methods of judgment that ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms that ensure image clarity when zooming and that shorten focus time. This makes the camera highly advanced in its functions, substantially improving the quality of your experience.

#### Protection
The camera allows for 6 kV lightning rating, which provides effective protection for both the camera and its structure against lightning.

## www.vikylin.com

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.8" CMOS |
| Pixel | 8 MP |
| Max. Resolution | 3840 (H) × 2160 (V) |
| ROM | 4 GB |
| RAM | 1 GB |
| Electronic Shutter Speed | 1/1 s–1/30,000 s |
| Min. Illumination | Color: 0.005 lux@F1.6<br>B/W: 0.0005 lux@F1.6<br>0 lux (IR light on) |
| Illumination Distance | 100 m (328.08 ft) (IR) |
| Illuminator On/Off Control | Zoom Prio; Manual; Smart IR; Off |
| Illuminator Number | 4 (IR) |

### Lens

| | |
|---|---|
| Focal Length | 5 mm–125 mm |
| Max. Aperture | F1.6–F3.6 |
| Field of View | H: 53.1°–3.4°; V: 30.4°–1.9°; D: 59.3°–3.9° |
| Optical Zoom | 25× |
| Focus Control | Auto; Semi-auto; Manual |
| Close Focus Distance | 0.1 m–1.5 m (0.33 ft–4.92 ft) |
| Iris Control | Auto; Manual |

| DORI Distance | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|
| | 2,161.4 m<br>(7,091.21 ft) | 864.6 m<br>(2,836.61 ft) | 432.3 m<br>(1,418.31 ft) | 216.1 m<br>(708.99 ft) |

### PTZ

| | |
|---|---|
| Pan/Tilt Range | Pan: 0° to 360° endless<br>Tilt: −15° to +90°, auto flip 180° |
| Manual Control Speed | Pan: 0.1°–200°/s<br>Tilt: 0.1°–120°/s |
| Preset Speed | Pan: 240°/s; Tilt: 200°/s |
| Preset | 300 |
| Tour | 8 (up to 32 presets per tour) |
| Pattern | 5 |
| Scan | 5 |
| Power-off Memory | Yes |
| Idle Motion | Preset; Tour; Pattern; Scan |
| PTZ Protocol | DH-SD<br>Pelco-P/D (auto recognition) |

### Intelligence

| | |
|---|---|
| IVS (Perimeter Protection) | Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc. |
| Face Detection | Yes |
| SMD | Yes |

### Video

| | |
|---|---|
| Video Compression | Smart H.265+; H.265; Smart H.264+; H.264B; H.264M; H.264H; MJPEG (Sub Stream 1) |
| Streaming Capability | 3 streams |
| Resolution | 4K (3840 × 2160); 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) |
| Video Frame Rate | Main stream: 4K/4MP/1080p/1.3M/720p (1–25/30 fps)<br>Sub stream 1: D1/CIF (1–25/30 fps)<br>Sub stream 2: 1080p/1.3M/720p/CIF (1–25/30 fps) |
| Bit Rate Control | CBR; VBR |
| Video Bit Rate | H.264: 3328 kbps–8192 kbps<br>H.265: 1280 kbps–8192 kbps |
| Day/Night | Auto (ICR); Color; B/W |
| BLC | Yes |
| WDR | Yes |
| HLC | Yes |
| White Balance | Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp |
| Gain Control | Auto; Manual |
| Noise Reduction | 2D NR; 3D NR |
| Motion Detection | Yes |
| Region of Interest (RoI) | Yes |
| Image Stabilization | EIS |
| Defog | Electronic defog |
| Digital Zoom | 16× |
| Image Rotation | 180° |
| Privacy Masking | Up to 24 areas can be set, with up to 8 areas in the same view |
| S/N Ratio | ≥ 55 dB |

### Audio

| | |
|---|---|
| Audio Compression | G.711a; G.711Mu; G.726; MPEG2-Layer2; G.722.1; G.729; G.723 |

### Network

| | |
|---|---|
| Network Port | RJ-45 (10/100 Base-T) |
| Network Protocol | HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; TCP; RTMP |
| Interoperability | ONVIF Profile S&G&T; CGI |
| User/Host | 20 (total bandwidth: 64 MB) |
| Storage | FTP; Micro SD card (256 GB) |
| Browser | IE 7 and later versions<br>Chrome 42 and earlier versions<br>Firefox 52 and earlier versions<br>Safari |
| Management Software | Smart PSS; DSS; DMSS; Easy4ip; IVSS; Player; Configtool; NVR; Smart Player |

| Mobile Client | iOS; Android; iPhone; iPad |
|---|---|

## Certification

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

## Port

| Audio Input | 1 channel |
|---|---|
| Audio Output | 1 channel |
| Two-way Audio | Yes |
| Alarm Input | 2 channel, digital input (0–5 VDC) |
| Alarm Output | 1 channel |
| Alarm Linkage | Capture; preset; tour; pattern; recordings on SD card; alarm digital input; send email |
| Alarm Event | Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection |

## Power

| Power Supply | 12 VDC, 3 A (± 10%)<br>PoE+ (802.3at) |
|---|---|
| Power Consumption | Basic: 9.8 W<br>Max.: 20 W (illuminator) |

## Environment

| Operating Temperature | −40 °C to +70 °C (−40 °F to +158 °F) |
|---|---|
| Operating Humidity | ≤ 95% |
| Protection | IP66; TVS 6000 V lightning proof; surge protection; voltage transient protection |

## Structure

| Product Dimensions | 269.9 mm × Φ160 mm (10.62" × Φ6.30") |
|---|---|
| Net Weight | 3.0 kg (6.61 lb) |
| Gross Weight | 4.3 kg (9.48 lb) |

## Ordering Information

| Type | Model | Description |
|---|---|---|
| 8M Wizsense PTZ Camera | DH-SD49825XB-HNR | 8MP 25x Starlight IR PTZ AI Network Camera |
| | SD49825XB-HNR | 8MP 25x Starlight IR PTZ AI Network Camera |
| Accessories | PFB305W | Wall Mount Bracket |
| | DC12V/3A | Power Adapter |
| | PFA111 | Mount Adapter |
| | PFB300C | Ceiling Mount Bracket |
| | PFB301C | Ceiling Mount Bracket |
| | PFA151 | Corner Mount Bracket |
| | PFB303S | Parapet  Mount Bracket |
| | PFB301S-E | Plane Mount Bracket |
| | PFA150 | Pole Mount Bracket |
| | PFA120 | Junction Box |
| | PFA140 | Water-proof Power Box |

## Accessories

**Included:**



PFB305W
Wall Mount Bracket

**Optional:**



DC12V/3A
Power Adapter



PFA111
Mount Adapter



PFB300C
Ceiling Mount Bracket



PFB301C
Ceiling Mount Bracket



PFA151
Corner Mount Bracket



PFB303S
Parapet  Mount Bracket



PFB301S-E
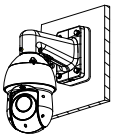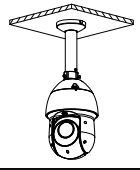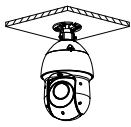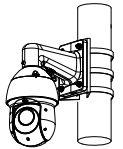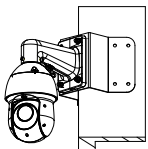Plane Mount Bracket



PFA150
Pole Mount Bracket
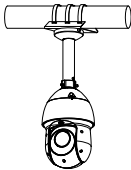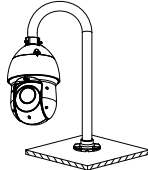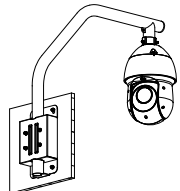


PFA120
Junction Box



PFA140
Water-proof Power Box

| Wall Mount | Ceiling Mount | Ceiling Mount |
|---|---|---|
| PFB305W+PFA120 | PFA111+PFB300C | PFA111+PFB301C |
|  |  |  |
| Pole Mount(Vertical) | Corner Mount | Pole Mount(Horizontal) |
| PFB305W+PFA150 | PFB305W+PFA151 | PFA111+PFB300C+PFA150 |
|  |  |  |
| Plane Mount | Parapet Mount | |
| PFB301S—E | PFA111+PFB303S | |
|  |  | |

## Dimensions (mm[inch])

Φ160.0 [Φ6.30]

Φ46.8 [Φ1.84]

269.9 [10.62]

Φ135.0 [Φ5.31]