

# PSD4624EX20

# 20X Day & Night 60fps Full HD PTZ Dome IP Camera

www.meritlilin.com



















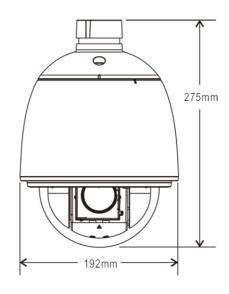
- Outdoor PTZ camera
- 20X optical zoom
- IP66 rain and dust resistant
- ► IR cut filter for day/night operations
- ► 1080P resolution
- ▶ Wide Dynamic Range up to 90dB
- H.264 and Motion JPEG multi-profile video streaming

## Introduction

The PSD4624EX20 is 1080P HD PTZ Dome IP Camera featuring 20X optical zoom capability. The high-speed dome is capable of streaming HD video at up to 60 frames per second. Featuring Wide Dynamic Range (WDR) feature, the PSD4624EX20 captures highlights and shadows simultaneously, eliminating pixilation and smear. Capable of making 360° continuous rotations, users can accurately position the camera to identify specific targets. PSD4624EX20 PTZ camera provide IP66-rated protection against water and dust. With built-in heaters and fans, the cameras are able to be used in temperatures ranging from -40°C - +50°C. The 20X optical zoom gives the PSD4624EX20 an impressive range. With a focal length of 4.3mm (WIDE) - 86mm (TELE), PSD4624EX20 is ideal for numerous applications.

## **Dimensions**

275 (H) x 192 (D) mm



# PTZ Control Function

Pan-Tilt-Zoom (PTZ) cameras are able to perform remote directional and zoom control. The cameras field of view can be quickly zoomed and repositioned as needed to identify specific targets



# 20X Optical Zoom

Remote pan/tilt/zoom operations with 20X optical lens makes it possible to zoom in on distant object with absolute clarity



# Wide Dynamic Range (WDR)

Wide Dynamic Range (WDR) displays details of both the brightest and darkest areas. WDR can extend image visibility under high contrast lighting scenes and improve image quality



## Day and Night Operations via Removal of the IR-cut filter

PSD4624EX20 camera was designed using a mechanical IR cut filter for increased IR sensitivity resulting in improved night time images. The removable IR-cut filter allows day and night operations even in the low lux condition providing outstanding vision



# **ONVIF** compliant

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. PSD4624EX20 camera is ONVIF Profile S conformant



# Video Security App

Available on Android and iOS – LILINViewer app provides security alarm push notification, real-time live viewing, and remote video playback





#### **Motion Detection**

Detect motion and capture the event. Motion in the selected area will provoke an alert.



## **Audio Detection**

With Audio Detection technology, an alarm is triggered based on ambient sound conditions as the threshold



### **Alarm Detection**

Alarm Detection is designed to provide the electronic detection of intruders



## SD Cards in Sync with NAV Software

PSD4624EX20 camera with built-in Micro SD/SDHC/SDXC card slots can provide redundant video viewing and recording. You can synchronize an SD card with LILIN VMS (Video Management Software) – Navigator (NAV)







## Two-way Audio Support

With 2-way audio communication, you can project your voice through the camera's speaker instead of hearing what's going on (1-way audio)



### Wind and Rain Standards

Meet international IP66 standards for dust and moisture resistant allowing you to install cameras in environments subject to wind and rain



# **Technical Specifications**

| ** B **                    |   |
|----------------------------|---|
| Video Performance<br>Model | DCD4624EV20   |
| Wodel                      | PSD4624EX20   |
| Min. Illumination          | 0.5 lux (1/30 sec, F1.6(Wide), 50IRE, AGC-Gain: 30dB ICR<br>OFF Color mode)                                       |
| Lens / Night vision (infr  | ared LED)   |
| Lens zoom ratio            | 20X Optical   |
| Focal Length               | 4.7 (WIDE) – 117.5 (TELE) mm  |
| Minimum Aperture<br>Ratio  | 1:1.6 (Wide) – 3.5 (Tele)   |
| Iris Range                 | F1.6 – 32 , Close   |
| Iris Control               | DC IRIS , ALC ( Adjustable Output Target Level ) / Manual   |
| Minimum Object<br>Distance | 30 cm (WIDE end), 1.5M (TELE end)   |
| Angle of View              | (H) $59.94^{\circ}(W) - 3.30^{\circ}(T) (V) 36.16^{\circ}(W) - 1.87^{\circ}(T)$                                   |
| Zoom Speed                 | 0 – 7 Selectable [ Fast : Approx. 6.0 Second ( Tele to Wide in Manual Mode ]                                      |
| Focus Speed                | 0 – 7 Selectable [ Fast : Approx. 6.0 Second ( Far to Near ) Manual Mode ]  |
| Focus                      | Auto ( Continue / Interval / Zoom Trigger / One Push), Manu<br>Focus  |
| Sensor                     |   |
| Pick Up Element            | 1/2.8" CMOS image sensor  |
| Effective Pixels           | 1944 (H) × 1224 (V) = 2,379,456 (pixels)  |
| Certifications             |   |
| CE                         | Yes, EMI Class A  |
| FCC                        | Yes, EMI Class A  |
| UL                         | Yes   |
| IP Rating                  | IP66  |
| Vandal Resistant Rating    | IK10  |
| Power and Environmen       | f   |
| Starting Temperature       | - 40°C – + 50°C ( -40°F – 122°F )   |
| Operating Temperature      | - 40°C - + 50°C ( -40°F - 122°F )   |
| Storage Temperature        | - 20°C - + 60°C ( -4°F - 160°F )  |
| Humidity                   | 0% – 90%  |
| Power Supply               | AC24V ±10% / DC24V / PoE++ (IEEE 802.3bt)   |
| Power Consumption          | AC24V, 20W / DC24V, 32W / PoE++, 31.2W (Heater OFF)<br>AC24V, 48W / DC24V, 51W / PoE++, 52.1W (Heater ON)         |
| Pan & Tilt                 |   |
| Control Function           | Pan and Tilt / Zoom and Focus / Iris and ICR / 256 Preset Position / Home Position                                |
| Auto Mode                  | OFF / SCAN(16) / SEQ(256) / TOUR(16) / PATROL(16) /<br>Auto TRACKING  |
| Schedule Setting           | OFF / SCAN (4)/ SEQ(256) / TOUR(4) / PATROL(4) / Prese<br>Position(256)(via web interface)                        |
| Panning range              | 360° Endless  |
| Panning mode               | Manual , Auto , Manual Position , Sequential Position   |
| Panning speed              | Manual Approx. 0.1°/s – 120°/s 8 Steps, Preset Approx. 1°/<br>– 360°/s, Alarm Trigger Speed 360°/s<br>-6° – +186° |
| Tilting range              |   |
| Tilting mode Tilting speed | Manual , Auto , Manual Position , Sequential Position  Manual Approx. 0.1°/s – 120°/s 8 Steps, Preset Approx. 1°/ |
| 9 00000                    | – 360°/s, Alarm Trigger Speed 360°/s  |
| PC Requirements            |   |
| CPU                        | Intel® Core™ i3 or higher grade   |
| os                         | Windows 7 or above  |
| RAM                        | 4GB or above, Dedicated Graphics Card   |
| INAIVI                     |   |

275 (H) × 192 (D) mm

Transparent dome cover

(microphone not built- in)

G.711 u-law / PCM

, Terminal block type

one audio input / one audio output Terminal block type

Digital 4 Input (TTL 5Vdc) , 2 Output (0.5A 120Vac,1A 24Vac)

CVBS 1.0Vp-p, 75 ohm, terminal block type

2750 g

Aluminum alloy

Mechanical

Dimension Weight

Window

Audio

Casing Material

Input / Output

Audio Input / Output

Alarm Input / Output

Live Video Output

| Video Streaming   | H 264 Main and High Profile Metics IDEC   |
|---|---|
| Video Compression   | H.264 Main and High Profile, Motion JPEG  |
| Video Streaming   | RTP/HTTP, RTP/TCP, RTP/UDP, Multicast 4 configurable streams in H.264 and Motion JPEG, configurable frame rat and bandwidth   |
| Video Bitrate   | 128Kbps – 12Mbps, Frame rate and bit rate controllable or the-fly, VBR / CBR / GOP supported; Fixed bitrate   |
| Network Security  |   |
| Encryption  | Base64 HTTP encryption  |
|   | Digest HTTP authentication, RTSP Authentication, IEEE   |
| Authentication  | 802.1x authentication   |
| Address Filter  | IP address filter, MAC address filter   |
| Access  | Multiple user access levels with password protection  |
| User accounts   | Multiple user access levels with password protection  |
| Multi IP address  | Yes   |
| Video Resolutions (H x  | V)  |
| Resolution  | 2MP(1920 × 1080), 1.3MP(1280 × 960), 1MP(1280 × 720).   |
| Maximum Frame Rate  | D1(720 × 480, 720 × 576), VGA(640 × 480), CIF(352 × 240)  Normal mode (H.264 / MJPEG) 60Hz: 60 FPS @ 1920 × 1080  50Hz: 50 FPS @ 1920 × 1080  WDR mode (H.264 / MJPEG) 60Hz: 30 FPS @ 1920 × 1080  50Hz: 25 FPS @ 1920 × 1080   |
| Video Eunctions   |   |
| Video Functions Scanning System   | Progressive Scan  |
| Infrared Cut Filter   | Auto / Day (Color) / Night (Mono)   |
|   | ATW / Indoor(3200K) / Outdoor(5800K) / Manual(1800K –   |
| White Balance   | 10500K)   |
| Back Light  | OFF / ON  |
| Compensation<br>Electrical Shutter  |   |
| Exposure Mode   | Auto / manual(1/30(25) – 1/10,000)  AUTO / IRIS.P / SHUT.P / MANUAL   |
| Sense Up  | OFF / ON  |
| Sense Up+   | Yes   |
| Auto Gain Control   | 50dB Variable Gain  |
| S/N Ratio   | More than 50dB (AGC off)  |
| 3D Noise Reduction  | OFF / ON (1 – 5)  |
| High Dynamic Range  | Up to 90dB  |
| Privacy Masking   | OFF / ON ( Up to 16 area)   |
| Image Effects   | Contrast, Sharpness, Mirror, Flip, Defog, DIS, Digital Zoom(x16)  |
| Integration   |   |
|   | Integrated to LILIN mobile app (LILIN Viewer) iPhone, iPad  |
| Mobile Application  | Android support  ONVIF Profile S, LILIN Navigator Enterprise 2.0, Third part  |
| Video Management  | VMS through LILIN HTTP API  |
| SD Card Recording   | Support Micro SD/SDHC/SDXC (up to 128GB) card for circular recording (card is not included)   |
| Maintenance   | Firmware update via HTTP and IP Scan; Firmware availab at web site  |
| IVS Basic 1.0   | Motion Detection, Tampering Detection, Advanced Motion Detection, Traffic Light Detection, Tripwire Detection, Object Counting  |
| Event Triggers  | Alarm(1 – 4) / Motion / Tamper / Audio / Network loss detection   |
|   |   |
|   | FTP, SMTP, SD card, SAMBA, Alarm output(2), HTTP post SNMP Trap, Preset position  |
|   | SNMP Trap, Preset position RS-485, Half-Duplex, support MLP2, Pelco D/P protocols   |
| Event actions Control Interface Languages   | SNMP Trap, Preset position  RS-485, Half-Duplex, support MLP2, Pelco D/P protocols  English, Traditional Chinese, Simplified Chinese, Spanish,  |
| Control Interface<br>Languages  | SNMP Trap, Preset position  RS-485, Half-Duplex, support MLP2, Pelco D/P protocols  English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria  |
| Control Interface  Languages  Network   | SNMP Trap, Preset position RS-485, Half-Duplex, support MLP2, Pelco D/P protocols English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese   |
| Control Interface   | SNMP Trap, Preset position  RS-485, Half-Duplex, support MLP2, Pelco D/P protocols  English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria  |
| Control Interface  Languages  Network  Ethernet   | SNMP Trap, Preset position RS-485, Half-Duplex, support MLP2, Pelco D/P protocols English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45 16X  |
| Control Interface Languages  Network Ethernet ePTZ & Digital Zoom   | SNMP Trap, Preset position RS-485, Half-Duplex, support MLP2, Pelco D/P protocols English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45 16X Pan, tilt, zoom in / out, absolute position, and video-click-  |
| Control Interface Languages  Network Ethernet ePTZ & Digital Zoom Web PTZ control OSD   | SNMP Trap, Preset position RS-485, Half-Duplex, support MLP2, Pelco D/P protocols English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45 16X Pan, tilt, zoom in / out, absolute position, and video-click- move Text overlay for date, time, and camera name, and PTZ position Embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz   |
| Control Interface Languages  Network Ethernet ePTZ & Digital Zoom Web PTZ control OSD CPU, Memory                                     | SNMP Trap, Preset position RS-485, Half-Duplex, support MLP2, Pelco D/P protocols English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45 16X Pan, tilt, zoom in / out, absolute position, and video-click- move Text overlay for date, time, and camera name, and PTZ position Embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz ARM11, 1GB DDR3, 256MB flash memory   |
| Control Interface Languages  Network Ethernet ePTZ & Digital Zoom Web PTZ control OSD   | RS-485, Half-Duplex, support MLP2, Pelco D/P protocols English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45 16X Pan , tilt , zoom in / out , absolute position, and video-click-move Text overlay for date, time, and camera name, and PTZ position Embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz ARM11, 1GB DDR3, 256MB flash memory Embedded Linux 3.8.0   |
| Control Interface  Languages  Network  Ethernet ePTZ & Digital Zoom  Web PTZ control  OSD  CPU, Memory OS                             | SNMP Trap, Preset position RS-485, Half-Duplex, support MLP2, Pelco D/P protocols English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45 16X Pan, tilt, zoom in / out, absolute position, and video-click- move Text overlay for date, time, and camera name, and PTZ position Embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz ARM11, 1GB DDR3, 256MB flash memory   |
| Control Interface Languages  Network Ethernet ePTZ & Digital Zoom Web PTZ control OSD CPU, Memory OS  Network Protocols Max number of | SNMP Trap, Preset position  RS-485, Half-Duplex, support MLP2, Pelco D/P protocols  English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45  16X  Pan , tilt , zoom in / out , absolute position, and video-click-move  Text overlay for date, time, and camera name, and PTZ position  Embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz ARM11, 1GB DDR3, 256MB flash memory  Embedded Linux 3.8.0  IPv4, IPv6, TCP, UDP, HTTP, SMTP, QoS, SNMP, SNMP Trap, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, SIP, Bonjour, 802.1x |
| Control Interface Languages  Network Ethernet ePTZ & Digital Zoom Web PTZ control OSD CPU, Memory OS  Network Protocols               | SNMP Trap, Preset position  RS-485, Half-Duplex, support MLP2, Pelco D/P protocols  English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungaria Japanese  10/100/1000Mbps Base-T, RJ-45  16X  Pan , tilt , zoom in / out , absolute position, and video-click move  Text overlay for date, time, and camera name, and PTZ position  Embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz ARM11, 1GB DDR3, 256MB flash memory  Embedded Linux 3.8.0  IPv4, IPv6, TCP, UDP, HTTP, SMTP, QoS, SNMP, SNMP Trap, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, SIP,                 |

LILIN Universal ActiveX & HTML5

Video Display