

PSR5024EX20 20X 1080P Day & Night 60 FPS IR Vandal Resistant PTZ IP Camera

www.meritlilin.com


- ▶ 20X Optical Zoom Lens(4.3 – 86mm)
- ▶ 16X Digital Zoom
- ▶ Day & Night (IR cut removable)
- ▶ Full HD 2.14 megapixel CMOS image sensor
- ▶ 60 FPS @ 1080P True H.264 AVC High Profile video compression
- ▶ H.264 and Motion JPEG multi-profile video streaming
- ▶ Digital Noise Reduction function
- ▶ HDR function up to 90dB
- ▶ IVS supported
- ▶ Alarm(1 – 4) / Motion / Tamper / Audio / Network loss detection
- ▶ Smart event support
- ▶ 150-metre infrared night vision
- ▶ Digital image stabilization
- ▶ Defog function
- ▶ Dynamic privacy zone mask
- ▶ Horizontal Flip
- ▶ 360° Endless panning
- ▶ Tilting range up to 210°
- ▶ Up to 256 Programmable Preset Positions
- ▶ 2-way audio supported
- ▶ ONVIF supported
- ▶ RS-485 supported
- ▶ Weatherproof IP66
- ▶ Vandal resistant approve IK10
- ▶ Rain repellent glass

Introduction

PSR5024EX20 is 20X 1080P Full HD Infrared PTZ IP Camera designed for both day and night environment. This high-speed PTZ IP Camera is capable of streaming HD video at up to 60 FPS. It features Wide Dynamic Range (WDR) up to 90dB, the PSR5024EX20 captures highlights and shadows simultaneously, eliminating pixilation and smear further providing perfect detailed images. Combined this with 3D Noise Reduction technology, Adaptive Tone Reproduction and built-in infrared LEDs, it ensures that the contrast of images in bright or dark areas is dramatically improved. The images are perfectly delivered.

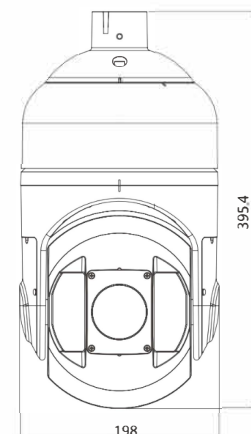
Capable of making 360° continuous rotations with a speed range of 0.1°~300° per second, users can accurately position the camera to identify specific targets. The 30x optical zoom and 16x digital zoom capacity give the PSR5024EX20 an impressive range.

The camera is IP66 rain and dust resistant and can be operated at the range of -40°C to 50°C.

It can also be installed in outside environment and resist to wind speed up to 60 meters per second (216km/h) like typhoon or super typhoon.

Dimensions

395 (H) × 198 (D) mm



20X Optical Zoom

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



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



Impact Resistant

IK10-certified housing designed to protect the camera from destructive behavior



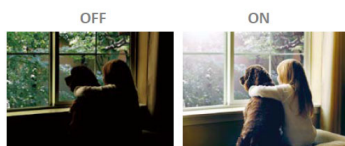
Day and Night Operations via Removal of the IR-cut filter

PSR5024EX20 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



Back Light Compensation

Back Light Compensation (BLC) adjusts the exposure of the entire image to properly expose the subject in the foreground. No matter if the main object is moving toward left, right, upper, lower, or any location in the screen, BLC provides perfect exposure for an object in front of strong back light



Sense Up+

Deliver outstanding video outputs in poor light conditions without experiencing motion blur. You can see video clearly even during nighttime without sufficient lighting support



3D Noise Reduction

Remove noise from a signal. Suppressing noise in an image in low light conditions and able to retain quality videos at the same time



High Dynamic Range

An High Dynamic Range (HDR) image is made by taking 3 frames of the same scene and each at different shutter speeds to display details of both the darkest and brightest areas. HDR can extend image visibility under high contrast lighting scenes and improve image quality



Privacy Masking

Privacy Masking is a feature used to protect personal privacy by concealing private areas in the camera's field of view. Doorways and house windows for example are not subject to surveillance



Video Security App

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



SD Cards in Sync with NAV Software

PSR5024EX20 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)



Advanced Motion Detection

Detect motion and capture the events. Motion in the selected area will provoke an alert. Time of motion in given direction can be detected by simply drawing an arrow on the video



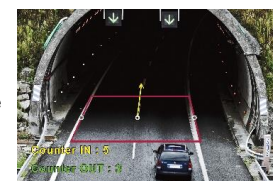
Tripwire Detection

Tripwire Detection can be used where physical security is impractical or even impossible; i.e. railway tracks. An alarm can be enabled in either directions across the tripwire. Line Crossing that an object crossing a line drawn anywhere in the scene can be detected, and also Zone Intrusion that any arbitrary shape zone can be set to monitor intrusion



Object Counting

Object Counting is able to accurately to input images containing similar objects. Intelligent Object Counting technology includes People Counting feature – people enter or exit an area over time can be counted, as well as Vehicle Counting feature – to detect and track vehicle in real-time



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Video Performance

Model	PSR5024EX20
Min. Illumination	0.5 lux (1/30 sec, F1.6(Wide), 50IRE, AGC-Gain: 30dB ICR-OFF Color mode)

Lens / Night vision (infrared LED)

Lens zoom ratio	20X Optical
Focal Length	4.3 (WIDE) – 86 (TELE) mm
Minimum Aperture 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 Distance	30 cm (WIDE end), 1.5M (TELE end)
Angle of View	(H) 64.45°(W) – 2.41°(T) (V) 39.27°(W) – 1.36°(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) in Manual Mode]
Focus	Auto (Continue / Interval / Zoom Trigger / One Push), Manual Focus
Peak Wavelength	850nm
Beam Spread	Automatically adjusted, Depending on the zoom ratio
Radiant Distance	150M

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
IP Rating	IP66
Vandal Resistant Rating	IK10

Power and Environment

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, Max.80W / DC24V, Max.80W / PoE++, Max. 55W

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) / Auto TRACKING
Schedule Setting	OFF / SCAN (4) / SEQ(256) / TOUR(4) / PATROL(4) / Preset 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°/s – 300°/s, Alarm Trigger Speed 300°/s
Tilting range	-30° – +210°
Tilting mode	Manual , Auto , Manual Position , Sequential Position
Tilting speed	Manual Approx. 0.1°/s – 120°/s 8 Steps, Preset Approx. 1°/s – 300°/s, Alarm Trigger Speed 300°/s

PC Requirements

CPU	Intel® Core™ i3 or higher grade
OS	Windows 7 or above
RAM	4GB or above, Dedicated Graphics Card
Web browser	Microsoft® Internet Explorer® 9 or above

Mechanical

Dimension	395 (H) × 198 (D) mm
Weight	6000 g
Casing Material	Aluminum alloy
Window	Ø55 Heat Resistant Glass & Rain repellent glass

Input / Output

Audio Input / Output	one audio input / one audio output Terminal block type (microphone not built-in)
Live Video Output	CVBS 1.0Vp-p, 75 ohm, terminal block type
Audio	G.711 u-law / PCM
Alarm Input / Output	Digital 4 Input (TTL 5Vdc) , 2 Output (0.5A 120Vac, 1A 24Vac) , Terminal block type

Video Streaming

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 rate and bandwidth
Video Bitrate	128Kbps – 12Mbps, Frame rate and bit rate controllable on-the-fly, VBR / CBR / GOP supported; Fixed bitrate

Network Security

Encryption	Base64 HTTP encryption
Authentication	Digest HTTP authentication, RTSP Authentication, IEEE 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), D1(720 × 480, 720 × 576), VGA(640 × 480), CIF(352 × 240)
Maximum Frame Rate	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 Functions

Scanning System	Progressive Scan
Infrared Cut Filter	Auto / Day (Color) / Night (Mono)
White Balance	ATW / Indoor(3200K) / Outdoor(5800K) / Manual(1800K – 10500K)
Back Light Compensation	OFF / ON
Electrical Shutter	Auto / manual(1/30(25) – 1/10,000)
Exposure Mode	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

Mobile Application	Integrated to LILIN mobile app (LILIN Viewer) iPhone, iPad, Android support
Video Management	ONVIF Profile S, LILIN Navigator Enterprise 2.0, Third party 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 available 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
Event actions	FTP, SMTP, SD card, SAMBA, Alarm output(2), HTTP post, SNMP Trap, Preset position
Control Interface	RS-485, Half-Duplex, support MLP2, Pelco D/P protocols , Terminal block type
Languages	English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungarian, Japanese

Network

Ethernet	10/100/1000Mbps Base-T, RJ-45
ePTZ & Digital Zoom	16X
Web PTZ control	Pan , tilt , zoom in / out , absolute position, and video-click-n-move
OSD	Text overlay for date, time, and camera name, and PTZ position
CPU, Memory	Embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz ARM11, 1GB DDR3, 256MB flash memory
OS	Embedded Linux 3.8.0
Network Protocols	IPv4, IPv6, TCP, UDP, HTTP, SMTP, QoS, SNMP, SNMP Trap, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTPC, Telnet, ICMP, IGMP, ONVIF Profile S, SIP, Bonjour, 802.1x
Max number of online users	10 user accounts available
Video Display	LILIN Universal ActiveX & HTML5