PTZ series│Outdoor PTZ Camera

IPS4204EA/4208EA
20X Day & Night 30fps Full HD PTZ Dome IP Camera

Speed Dome · **SD Card recording** · **PoE IP Based** · **PTZ control**

20X zoom · **IK10** · **IP66 weather proof** · **2way Audio**

1080P HD · **Onvif**

▸ Outdoor PTZ camera

▸ 20X optical zoom

▸ IP66 rain and dust resistant

▸ IR cut filter for day/night operations

▸ 1080p HD resolution

▸ Wide Dynamic Range up to 90dB

▸ IK10 impact resistant
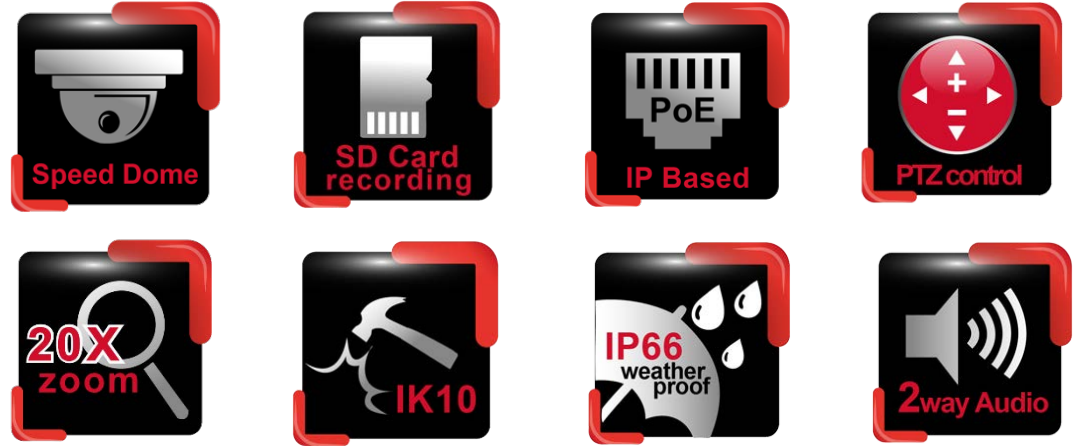
The IPS4204EA / IPS4208EA is outdoor fitted Day & Night 1080P Full HD PTZ Dome IP camera. The high-speed dome is capable of streaming HD video at up to 30 FPS. Featuring Wide Dynamic Range (WDR) feature, the IPS4204EA / IPS4208EA captures highlights and shadows simultaneously, eliminating pixilation and smear. Combine this with 3D Noise Reduction technology and adaptive tone reproduction and the contrast of images in bright or dark areas is dramatically improved. Capable of making 360° continuous rotations, users can accurately position the camera to identify specific targets. The 20x optical zoom gives the IPS4204EA / IPS4208EA an impressive range. With a focal length of 4.7mm-94mm, an IP66 weatherproof rating and a compact design, the IPS4204EA / IPS4208EA is ideal for numerous applications.
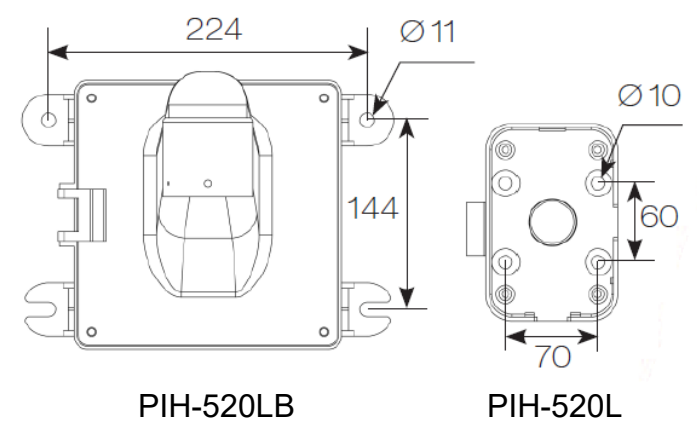
Mounting Options

Mount	Model
Wall Mount	BTS03G
Wall Mount	PIH-520LB
Wall Mount	PIH-520L
Swan Neck	PIH-520G
Pendant Mount	PIH-520HB
Pendant Mount	BTS06W

Dimensions: Ø 210 x 332mm

Ø 210 — 332

Diagram of mounting holes (unit in mm):

224 — Ø 11 — Ø 10 — 144 — 60 — 70

PIH-520LB   PIH-520L
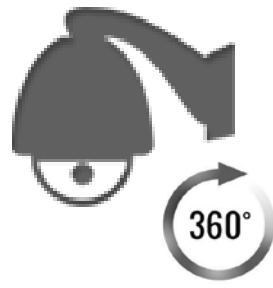
PTZ Control Function

Pan-Tilt-Zoom (PTZ) cameras are able to perform remote directional and zoom control. Capable of making 360° continuous rotations and 102° tilt angle, 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

Without 20X Optical Zoom | With 20X Optical Zoom

Video Security App

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

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

IPS4204EA / 4208EA 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

SD Cards in Sync with NAV Software

IPS4204EA / 4208EA camera with built-in Micro SD/SDHC/SDXC card slots can provide redundant video viewing and recording. You can synchronise an SD card with LILIN VMS (Video Management Software) – Navigator (NAV)

Motion Detection

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

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

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)

ONVIF-compliant

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. IPS4204EA / 4208EA PTZ camera is ONVIF Profile S conformant

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

ON | OFF

Alarm Detection

Alarm Detection is designed to provide the electronic detection of intruders

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

ON | OFF

Back Light Compensation

Off | On

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
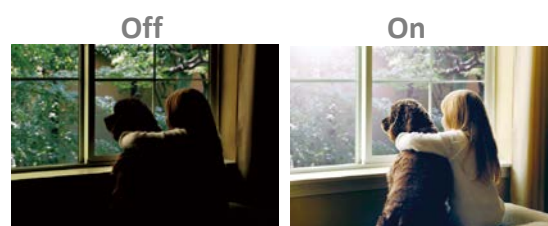
IK10 Impact Resistant

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

20X Day&Night 1080P Full HD PTZ Dome IP Camera

Video performance

Model#	IPS4204EA	IPS4208EA
Min. illumination/Low Light Mode (Colour)	0.5 lux (1/30 sec, F1.6(Wide), 50IRE, AGC-Gain: 30dB ICR-OFF Color mode) 0.2 lux (1/30 sec, F1.6(Wide), 50IRE, AGC-Gain: 30dB ICR-ON B/W mode) 0.1 lux (1/8 sec, F1.6(Wide), 50IRE, AGC-Gain: 30dB ICR-OFF Color mode) 0.01 lux (1/8 sec, F1.6(Wide), 50IRE, AGC-Gain: 30dB ICR-ON B/W mode)	
High Dynamic Range	Up to 90dB	

Power

Model#	IPS4204EA	IPS4208EA
Power Consumption	PoE+, 14W (does not support the heater) AC24V, 37W (Heater ON)	PoE+, 14W (does not support the heater) AC100 – 240V, 48W (Heater ON)
Power supply	PoE+ (IEEE 802.3at compliant) / AC24V ±10%	PoE+ (IEEE 802.3at compliant) / AC100 – 240V ±10%

Sensor

Image Sensor/Sensor type	1/2.8" CMOS image sensor
Effective pixels	1944 (H) × 1224 (V) = 2,379,456 (pixels)
Total number of pixels	1952 (H) × 1236 (V) = 2,412,672 (pixels)

Certifications

CE	Yes, EMI CLASS A
FCC	Yes, EMI CLASS A
IP Rating	IP66 waterproof
Vandal Resistant Rating / IK Rating	IK10 impact resistant

Lens

Lens zoom ratio	20X Optical
Lens/Focal length	4.7mm (WIDE) - 117.5mm (TELE)
Minimum aperture ratio	1:1.6 (WIDE)-3.5 (TELE)
Minimum object distance	30cm (WIDE end), 1.5m (TELE end)
Iris range	F1.6-32, close
Angle of View	(H)59.94°(W) – 3.30°(T) (V)36.16°(W) – 1.87°(T)

Pan & Tilt

Panning range	360° Endless
Panning mode	Manual, Auto, Manual Position, Sequential Position
Panning speed	Manual approx. 0.15°/s-120°/s 8 Steps, Preset approx. 1°/s-255°/s, Alarm Trigger Speed 360°/s
Tilting range	-6° - +96°
Tilting mode	Manual, Auto, Manual Position, Sequential Position
Tilting speed	Manual approx. 0.15°/s-120°/s 8 Steps, Preset approx. 1°/s-255°/s, Alarm Trigger Speed 360°/s

Environmental

Operating temperature	-10°C+ 50°C (14°F-122°F) / PoE+
	- 40°C-+ 50°C (-40°F-122°F) / AC
Operating humidity	0%-90%

PC requirement

CPU	Intel® Core™ i3 or higher grade
OS	Embedded Linux 2.6.32
RAM requirement	4GB or above, Dedicated Graphics Card
Web browser	Microsoft® Internet Explorer® 9.0 and later

Mechanical

Dimensions (H x D)	332 (H) × 210 (D) mm
Weight	3200g approx.

Video streaming

Video compression	H.264 , 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	128 Kbps to 8 Mbps Frame rate and bitrate controllable on-the-fly VBR / CBR / GOP supported

Video resolution (H x V)

1080p HD	1920 x 1080
720p HD	1280 x 720
D1	720 x 480, 720 x 576
CIF	352 x 240
Frame rate	H.264: up to 30FPS @ 1920 x 1080 Motion JPEG: up to 30FPS @ 720 x 480

Video functions

IR cut filter	Colour (Day), Monochrome (Night), Auto
Scanning system	Progressive scan
White balance	ATW/Indoor(3200K)/Outdoor(5800K) /Manual (1800K ~10500K)
Shutter Time	Auto / manual(1/1 to 1/10,000)
Exposure mode	Auto / Manual
Back light compensation	Off / BLC / WDR
3D Noise Reduction	Off / On (2D, 3D)
Dynamic privacy zone mask	Off / On (up to 16 areas)
Auto mode	Off / AUTO / SEQ / TOUR
PTZ control	Pan, tilt, zoom-in / zoom-out, absolute position, and mouse click function
Schedule setting	Off / Auto Mode / Preset position
Digital image stabilization	Off / On
Auto gain control	0 - 50dB
Image Effects	Contrast, Sharpness, Mirror, Flip, Defog, DIS, Digital Zoom(x16)

Integration

Mobile phone	Integrated to LILIN mobile app (LILIN Pro) iPhone, iPad, Android support
Video management	ONVIF Profile S LILIN Navigator Enterprise 5.0 Third party VMS through LILIN HTTP API
SD Card (recording)	Support Micro SD/SDHC/SDXC card for circular recording (card is not included)
Firmware	Firmware upgrade via HTTP Firmware available to download at meritlilin.com
IVS Basic 1.0	Motion Detection, Audio detection
Alarm event triggers	Alarm / motion / audio / Network lost detection
Alarm event actions	FTP, SMTP, SD card, Alarm output(1), HTTP post, SNMP Trap, Preset position, Push Service notification
Alarm weighted mode	Support

Network

Ethernet	10Mbps / 100Mbps, RJ-45
Connectivity	ONVIF Profile S
Users	10 simultaneous users
ePTZ & Digital Zoom	16X
OSD	Text overlay for date, time, camera name, and PTZ position
CPU	Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory
Video display	LILIN Universal ActiveX & LILIN Java Applet
OS	Windows 7 or above
Audio	2-way audio, G.711
Protocols	IPv4, IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, SNMP, Bonjour
IP address filter	Yes
Multi IP address	Yes

Network security

User accounts	10 users accounts available
Access	Multiple user access levels with password protection
Encryption	Base 64 HTTP encryption
Authentication	Digest HTTP authentication, RTSP authentication

Heater & Fan

Heater control/Heater activation	On: 15℃ , Off: 25℃
Blower control/Fan activation	On: 35℃ , Off: 25℃

Main functions

Control function	Pan and Tilt / Zoom and Focus / Iris and ICR / 128 Preset Position / Home Position
Digital zoom	16X
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]
Auto Focus	Auto (Continue / Interval / Zoom Trigger / One Push), Manual Focus
Iris	Auto / Manual

Input / output

Alarm input / output	6 Input (TTL 5Vdc), 2 Output (0.5A 120Vac,1A 24Vac)
Live video	CVBS 1.0 Vp-p / 75 Ω BNC

Warranty

Warranty	3 years, but lens and motors are limited in 1 year