

Pro series | Outdoor Bullet IR Camera

# IPR424X / 428X

## Day & Night 1080P HD Vari-focal IR IP Camera

www.meritlilin.com

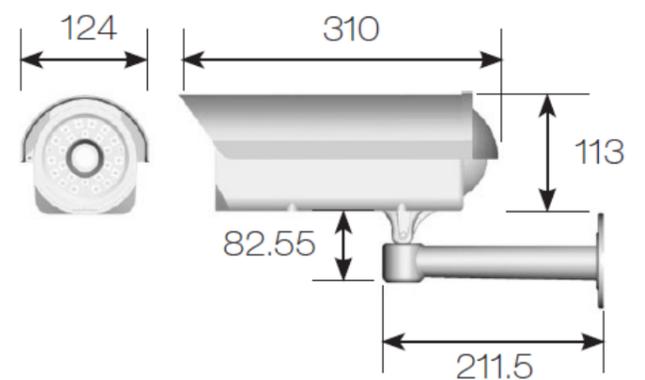


<p>2-way audio</p>	<p>H.264</p>	<p>Back Light Compensation</p>
<p>IP66</p>	<p>Day / Night</p>	<p>Easy to install</p>
<p>IP based PoE</p>	<p>SD card recording</p>	<p>IR Infrared night vision</p>

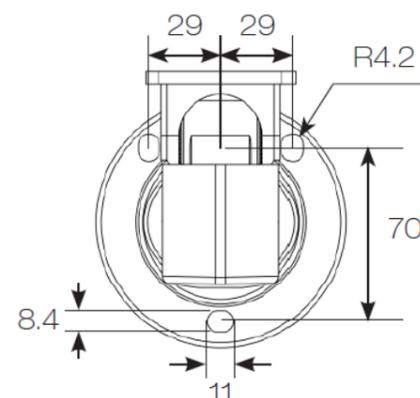
- ▶ Outdoor bullet IR IP camera
- ▶ Wide Dynamic Range
- ▶ On-board Infrared lights – The camera can view up to 55 metres at night
- ▶ IR cut filter for day/night operations
- ▶ 1080p HD resolution

**Dimensions (unit in mm):**

Body : 124 x 113 x 310 (W x H x D) Bracket : 211.5(L)



**Diagram of mounting holes (unit in mm):**



As with all Pro series cameras, the 1080P HD Vari-Focal IR IP Camera IPR424X / IPR428X incorporates Sense up+, a unique technology that successfully delivers stunning video in low-light conditions. Utilizing intelligent image signal processing, AGC control, and 3D Noise Reduction, this model successfully delivers the ultimate low-light image without motion blur. The IPR424X / IPR428X is capable of producing four independent video streams, different streams can be set for different applications, depending on the individual user requirements. The IP66-rated housing is designed to help the camera body withstand rain and dust and ensures operation under a multitude of harsh weather conditions.

## 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



## 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



## Video Security App

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



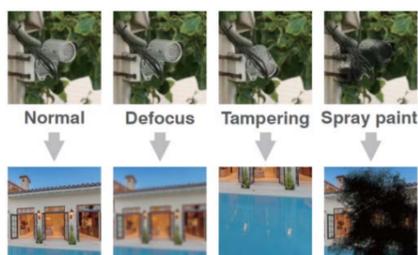
## ONVIF-compliant

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. IPR424X / 428X camera is ONVIF Profile S conformant



## Tamper Detection

Automatically detects camera sabotage or failure. Detects any attempts to tamper with the camera – partially or completely blocking its lens or field of view



## SD Cards in Sync with NAV Software

IPR424X / 428X camera with built-in Micro SD/SDHC card slots can provide redundant video viewing and recording. You can synchronise an SD card with LILIN VMS (Video Management Software) – Navigator (NAV)



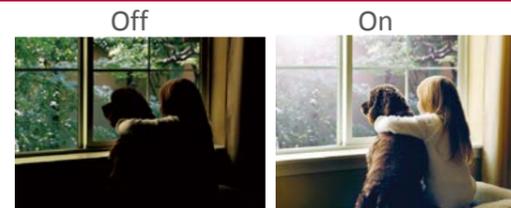
## Two-way Audio Support

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)



## 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



## Face Detection

Automatically detects a human face



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

IPR424X / 428X 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



## Motion Detection

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



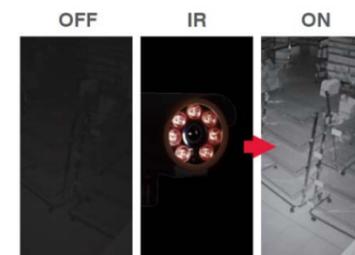
## Alarm Detection

Alarm Detection is designed to provide the electronic detection of intruders



## IR Infrared Night Vision

Infrared options with built-in LEDs that are able to see in almost complete darkness, providing clear, detailed video clarity at night-time for round-the-clock video surveillance



## Wide Dynamic Range

An Wide Dynamic Range 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. WDR can extend image visibility under high contrast lighting scenes and improve image quality



## Day & Night 1080P HD Vari-focal IR IP Camera

### Video performance & power

Model#	IPR424ESX3.6	IPR428ESX3.6
Low Light Mode (Colour)	0.1 Lux at F1.4 (Low light mode) / 0 Lux with IR LED on	
Power consumption	17W ( PoE+, 20W)	
Power supply	AC24V (±10%)	AC100~240V (±10%)
	PoE+ (IEEE 802.3at compliant)	

### Lens

Focal length	2.8~12 mm	
Iris	F1.4	
Angle of view	H	91.2°~25.5°
	V	59.4°~22.4°
	D	99°~37.3°

### Sensor

Sensor type	1/2.7" CMOS image sensor
Effective pixels	1920 (H) x 1080 (V) = 2,073,600 (pixel)
Chip size	5.856mm (H) x 3.276mm (V)

### Certifications

CE	Yes
FCC	Yes
IP rating / IK rating	IP66 waterproof / IK10

### PC requirement

CPU	Intel Pentium 4 1.8GHz or above
OS	Windows 2000 , Windows XP , Windows Vista, Windows 7, Windows 8
RAM	1GB or above ,Independent Display Card
Web browser	Microsoft® Internet Explorer® 6 and later

### Mechanical

Dimensions	Body : 124mm(W) x 113mm(H) x 310mm(D) , Bracket : 211.5mm(L)
Weight	2200g approx.
Window	Ø78 heat resistant glass

### Input / output

Live video output	CVBS 1.0Vp-p, 75 ohm, BNC connector
Audio input / output	Mono, 1.4 Vp-p , 50 KΩ , Terminal connector
Alarm input / output	Digital 1 input (TTL, +3~5VDC) / 1 Output (MOS Relay contact N.O., Load max. 40VDC/300mA)

### Video streaming

Video compression	H.264 , Motion JPEG
Streaming	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast
Bitrate	128Kbps~5Mbps
	Frame rate and bit rate controllable on-the-fly VBR / CBR / GOP supported
IP filter	Yes
RTSP Authentication	On / Off

### Network security

User accounts	10 user accounts available
Access	Multiple user access levels with password protection
Encryption	Base 64 HTTP encryption

### Environmental

Operating temperature	-40°C~+50°C (-40°F~122°F)
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### Video resolution (H x V)

1080P	1920 x 1080	
720P	1280 x 720	
D1	720 x 480	
CIF	352 X 240	
Multiple profile	Profile #1	H.264 : up to 30 FPS @ 1920 x 1080, MJPEG : up to 30 FPS @ 720 x 480
	Profile #2	H.264 : up to 30 FPS @ 1280 x 720, MJPEG : up to 30 FPS @ 352 x 240
	Profile #3	H.264 : up to 30 FPS @ 1920 x 1080, MJPEG : up to 30 FPS @ 1280 x 720
	Profile #4	H.264 : up to 30 FPS @ 720 x 480, MJPEG : up to 15 FPS @ 1920 x 1080

### Video functions

Day/Night (IR-cut filter)	Colour (Day), Monochrome (Night), Auto, Schedule
Scanning system	Progressive scan
White balance	Auto / tungsten / indoor / fluorescents1 / fluorescents2 / outdoor1 / outdoor2
Electric shutter	1/30s~1/8000s
Back light compensation	Off / On
Privacy masking	Off / on (4 zones)
Auto gain control	36 dB variable gain
Image effects	Brightness, Contrast, Hue, Saturation, Sharpness, Mirror, Flip
2D WDR	Off / auto / x2 / x3 / x4
D/N quality setting	Yes

### Integration

Mobile application	Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support
Video management	ONVIF Profile S LILIN CMX3.6 NAV 1.0 Third party VMS through LILIN HTTP API
Firmware	Firmware upgrade via HTTP Firmware available to download at meritlilin.com
Alarm event	FTP,SMTP, HTTP post, SD card, SAMBA
Alarm weighted mode	Yes

### Network

Ethernet Connectivity	10Mbps / 100Mbps , RJ-45
Users	8 simultaneous users
OSD	Text overly for date, time , and camera name
CPU, Memory	Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory
Video display	LILIN Universal ActiveX & LILIN Java Applet
OS	Embedded Linux 2.6.32
2-way audio supported	G.711 / PCM
Protocols	IP, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, SNMP, SIP, Bonjour
Multi IP address	Yes

### Main functions

Sense up	Off / 1 frame / 2 frames / 3 frames / 7 frames
Sense up +	Yes
3D Noise Reduction	Off / 1~32 selectable
Alarm function	Face / tampering / audio / motion / alarm detection
	Image upload over FTP and E-mail by face / tampering / audio / motion detection
SD card recording	Support SD/SDHC card for circular recording (card is not included)
ePTZ & digital zoom	Yes, ROI is supported

### Night vision (infrared LED)

Distance	55m
Peak wavelength	850nm
Beam spread	30°