ZR7424 / ZR7428

Auto Focus Outdoor Waterproof IR IP Bullet Camera

www.meritlilin.com

IP66

SD card recording

Infrared

IP based / PoE

▸ Outdoor Bullet Camera

▸ Powerful Auto Focus feature

▸ IP66 rain and dust resistant

▸ 45-metre infrared night vision

▸ 1080p resolution

Onvif S

Full HD 1080

Dimensions: (unit: mm)
Body : 121.5(W) x 109(H) x 231(D); Bracket : 160(L)

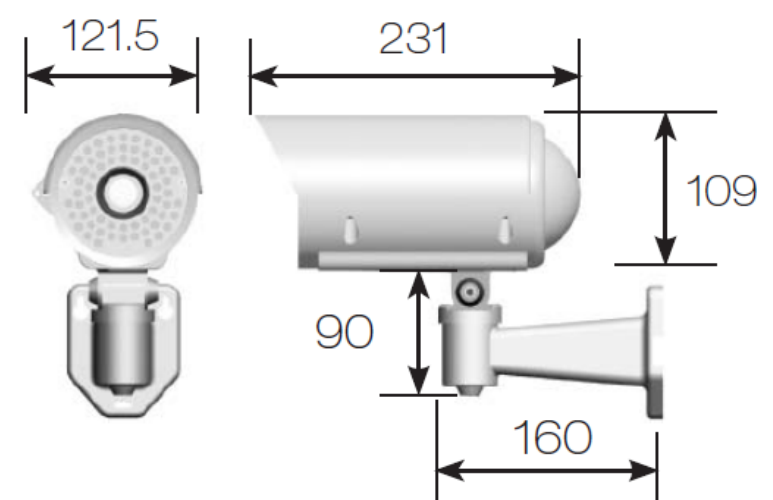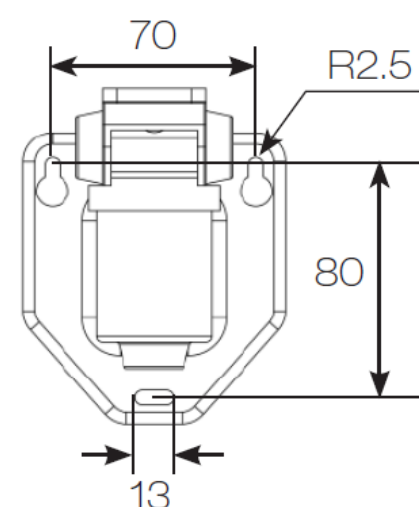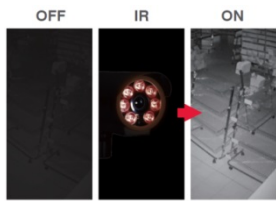121.5   231   109   90   160

Diagram of mounting holes:

70   R2.5   80   13

As with all Z series Auto Focus cameras, the 1080P HD Vari-Focal IR IP Camera ZR7424X/ZR7428X 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. Offering flexible Auto Focus installation feature, ZR7424X/ZR7428X fits into a range of environments such as retail, home, office, and hotel security. The ZR7424X/ZR7428X 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.

Built-in IR Illumination

ZR7424/ZR7428 IP camera with infrared (IR) illumination where IR LEDs are built-in. Built-in with IR LED, the camera provides night vision up to 25 metres

Auto Focus feature

Use the camera software to trigger the auto focus function at any time during installation or after. Auto Focus feature to automatically focus the camera from a distant location, which eases the process on installation and helps you effectively position the camera at the right focus angle in a matter of seconds

Video Security App

Available on Android and iOS – **LILINViewer** 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

ZR7424/ZR7428 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

ZR7424/ZR7428 camera with built-in Micro SD/SDHC card slots can provide redundant video viewing and recording. You can synchronize an SD card with LILIN VMS (Video Management Software) – Navigator (NAV)

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

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)
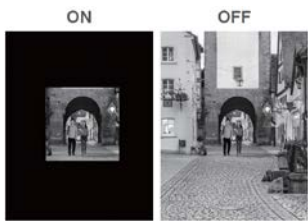
3D Noise Reduction

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

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

Region of Interest (ROI)

A Region of Interest (ROI) is a specified part of an image that is highlighted from a camera. This feature is great for highlighting areas such as doors or areas of access where an overall scene is still required

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

ONVIF-compliant

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. ZR7424/ZR7428 camera is ONVIF Profile S conformant

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

Face Detection

Automatically detects a human face

Motion Detection

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

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
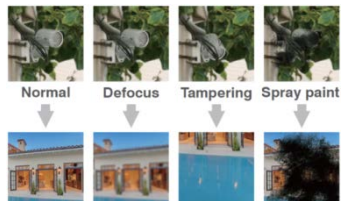
Auto Focus Outdoor Waterproof IR IP Bullet Camera

Video performance

Model#	ZR7424EX3	ZR7428EX3
Low Light Mode (Colour)	0.02 lux at F1.4	
With Infrared	0.0 lux	
2D WDR	Off / Auto / x2 / x3/ x4 (by normal mode)	

Power

Power consumption	15W (PoE+, 17W)	
PoE+	IEEE 802.3at	
Power supply	AC24V (±10%)	AC100 – 240V (±10%)
	Power over Ethernet+ (IEEE 802.3at compliant)	

Sensor

Sensor type	1/2.8" CMOS image sensor
Total sensor pixels	1984 (H) x 1105 (V) = 2,192,320 pixels

Certifications

Model#	ZR7424EX3	ZR7428EX3
CE	EN 55022: 2010 Class A EN 50130-4: 2011 IEC 61000-4-2: 2008 IEC 61000-4-3: 2006+A1: 2007+A2: 2010	EN 55022: 2010 Class A IEC 61000-3-2:2005+A1:2008+A2:2009 IEC 61000-3-3:2013
FCC	FCC Part 15: Subpart B Class A CISPR 22: 2008 Class A	FCC Part 15: Subpart B Class A CISPR 22: 2008 Class A
IP Rating	IP66 waterproof	

Lens

Focal length		2.8mm ∼ 12 mm (zoom / focus motorized)
Iris		F1.4
Angle of View	H	91.2° ∼ 25.5°
	V	68.4° ∼ 19.1°
	D	114° ∼ 31.9°

Night vision (infrared LED)

Distance	45m
Peak wavelength	850nm, high efficiency array
Beam spread	30°

Environmental

Operating temperature	-40℃ to 50℃ (-40℉ to 122℉)

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

Mechanical

Dimensions (W x H x D)	Body : 121.5 x 109 x 231mm, Bracket : 160mm (L)
Weight	1700g approx.
Window	Ø92 Heat Resistant Glass

Input / output

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)
Live video output	CVBS 1.0Vp-p, 75 ohm, BNC connector

Network security

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

Video streaming

Video compression	H.264 , Motion JPEG
Streaming	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast Multiple configurable streams in H.264 and M-JPEG, configurable frame rate and bandwidth
Bitrate	128Kbps to 8Mbps Frame rate and bitrate controllable on-the-fly VBR / CBR / GOP supported
IP filter	Yes
RTSP Authentication	On / Off

Video resolution (H x V)

1080p HD		1920 x 1080
720p HD		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
Auto Focus	One push
Adjustable picture setting	Contrast, Brightness, Saturation
White balance	Auto / Tungsten / Indoor / Fluorescents1 / Fluorescents2 / Outdoor1 / Outdoor2
Shutter	1/30(1/25)s to 1/8000s
Back light compensation	On / Off
3D noise reduction	Off / 1 to 32 selectable
Privacy masking	Four independent areas
Sense Up	Off / 1 frame / 2 frames / 3 frames / 7 frames
Sense Up+	Yes
Auto gain control	36 dB variable gain
Other functions	Sharpness, Image flip, Image mirror, Defog, Hue
D/N quality setting	Yes

Integration

Mobile application	Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support
Video management	ONVIF Profile S LILIN NAV 1.0 Third party VMS through LILIN HTTP API
SD card recording	Support Micro SD/SDHC card for circular recording (card is not included)
Web browser	Microsoft® Internet Explorer® 6.0 and later
Firmware	Firmware upgrade via HTTP
Alarm functions	Face/ tampering/ audio /motion/ alarm detection
Alarm event	FTP,SMTP, HTTP post, SD card, SAMBA
Alarm weighted mode	Yes

Network

Ethernet	10Mbps / 100Mbps Base-T, RJ-45
Connectivity	ONVIF Profile S
Users	8 simultaneous users
ePTZ & digital zoom	Yes, ROI (Region of Interest) is supported
OSD	Text overlay 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	G.711 / PCM
Protocols	IPv4, IPv6, 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