

L series | IP bullet camera

LR7022

D/N Outdoor Waterproof 30M IR Range IP Camera

www.meritlilin.com



Back Light Compensation 	IP66 	SD card recording
Day/Night 	Infrared 	IP based PoE

- ▶ Outdoor Bullet Camera
- ▶ IR cut filter for day/night operations
- ▶ IP66 rain and dust resistant
- ▶ 30-metre infrared night vision
- ▶ 1080p resolution

Dimensions: (unit: mm)

Body : 82(W) x 72.5(H) x 154(D) Bracket: 101(L)

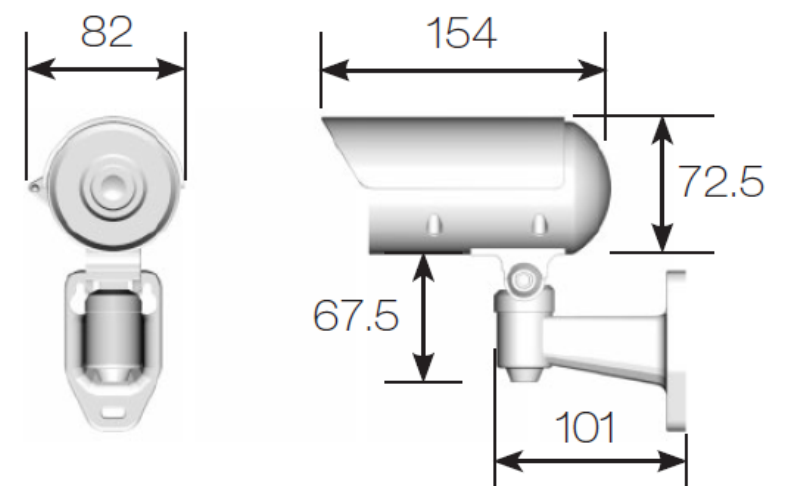
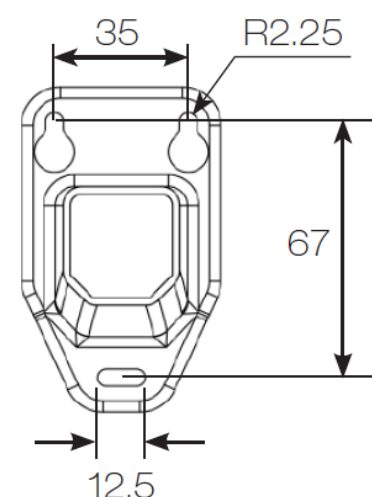


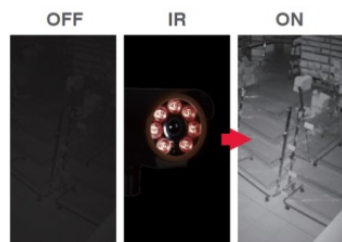
Diagram of mounting holes:



The L series cameras are your economical choice for small and medium sized businesses. LR7022 in the L series is featuring built-in Sense up+ technology to deliver stunning video in low-light conditions. Utilizing intelligent image signal processing, 2D WDR function, AGC control, and 3D Noise Reduction, the combination successfully delivers the ultimate low-light image without motion blur. 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. Support with PoE, privacy mask, White balance, and minimum illumination 0.15 Lux at F1.6 Low Light Mode or 0.18 Lux at F1.8 Low Light Mode.

Built-in IR Illumination

LR7022 IP camera with infrared (IR) illumination where IR LEDs are built-in. Built-in with IR LED, the camera provides night vision up to 30 metres



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

LR7022 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)



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



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



Motion Detection

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



ONVIF-compliant

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. LR7022 camera is ONVIF Profile S conformant



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

LR7022 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



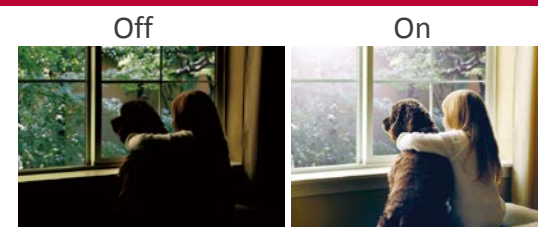
Sense Up+

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



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



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



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



D/N Outdoor 30M IR Range Vari-focal IP Camera

Video performance

Model#	LR7022E4	LR7022E4
Low Light Mode (Colour)	0.08 Lux at F1.6	0.08 Lux at F1.6
With Infrared	0.0 lux	
2D WDR	Off / x2 / x3 / x4	

Power

Power consumption	DC12V, 9W / PoE, 10.2W	
PoE	IEEE 802.3af	
Power supply	DC12V ±10%	
	Power over Ethernet (IEEE 802.3af compliant)	

Sensor

Sensor type	1/2.7" CMOS image sensor	
Total sensor pixels	1920 (H) x 1080 (V) = 2,073,600 pixels	

Certifications

Model#	LR7022E4	LR7022E4
CE	Emission EN 55022: 2010 Class A IEC 61000-3-2:2005+A1:2008+A2:2009 IEC 61000-3-3:2008	
FCC	FCC Part 15: Subpart B (10-1-10 Edition) Class A CISPR 22: 2008 Class A	
IP Rating	IP66 waterproof	

Lens

Model #	LR7022E4	LR7022E4	
Focal length	4 mm	6 mm	
Iris	F1.6	F1.6	
Angle of View	H	84.8°	84.8°
	V	45.2°	31.4°
	D	100.6°	67.3°

Night vision (infrared LED)

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

Environmental

Operating temperature	-40°C to 50°C (-40°F to 122°F)
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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 : 82 x 72.5 x 154mm, Bracket : 101mm (L)
Weight	600g approx.
Window	Ø65 Heat Resistant Glass

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 ~ 5Mbps 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
Maximum frame rate	H.264 : up to 15 fps @ 1920 x 1080 , 30fps @ 1280 x 720 , 30fps @ 720 x 480 Motion JPEG : up to 15 fps @ 1920 x 1080 , 30 fps @ 720 x 480 , 30 fps @ 352 x 240

Video functions

Day/Night (IR-cut filter)	Colour (Day), Monochrome (Night), Auto, Schedule
Scanning system	Progressive scan
Chip size	5.856mm (H) x 3.276mm (V)
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, 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	Motion detection triggering recording into SD card Image upload over FTP and E-mail by motion 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
Digital zoom	Yes
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
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

Network security

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