

ZR8022EX20 1080P Day & Night Vari-Focal IR Bullet IP Camera

www.meritlilin.com



- ▶ Full HD 2 megapixel CMOS image sensor
- ▶ 3D noise reduction (MCTF)
- ▶ 2D WDR function
- ▶ Digital PTZ supported
- ▶ IVS supported
- ▶ High efficiency IR LED, radiant distance up to 60m
- ▶ Powerful Auto Focus feature
- ▶ IP67 rain and dust resistant

Dimensions

116(W) × 112(H) × 372(D) mm

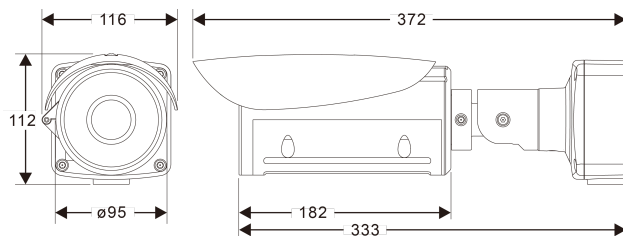
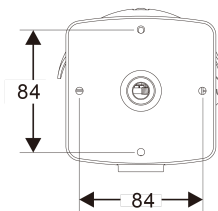


Diagram of mounting holes:(unit in mm)



Wind and Rain Standards

Meet international IP67 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



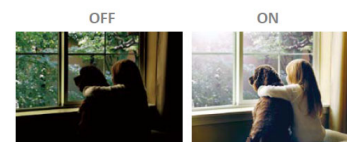
Day and Night Operations via Removal of the IR-cut filter

ZR8022EX20 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



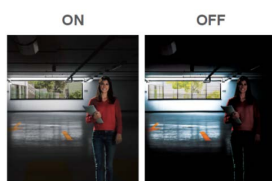
3D Noise Reduction

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



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



Video Security App

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



SD Cards in Sync with NAV Software

ZR8022EX20 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)



1080P Day & Night Vari-Focal IR Bullet IP Camera	
Video Performance	
Model	ZR8022EX20
Min. Illumination	Color : 0.2 Lux at F1.6 ; BW : 0.02Lux ; 0 Lux with IR LED ON
Power and Environment	
Starting Temperature	-10°C – +50°C (14°F – 122°F)
Operating Temperature	-40°C – +50°C (-40°F – 122°F)
Storage Temperature	-25°C – +60°C (-13°F – 140°F)
Humidity	0% – 90% RH
Power Supply	DC12V ±10% / PoE+ (IEEE 802.3at compliant)
Power Consumption	DC12V 18W / PoE+, 21W
Lens / Night vision (infrared LED)	
Focal Length	4.7mm – 94mm
Iris	F1.6 – F3.0
Iris Control	DC-IRIS
Angle of View	55.5° (W) – 3° (T) (H) 43° (W) – 2.2° (T) (V) 72° (W) – 3.8° (T) (D)
Peak Wavelength	850nm, high efficiency array
Beam Spread	Automatically adjusted, Depending on the zoom ratio
Radiant Distance	60M
Sensor	
Pick Up Element	1/2.8" CMOS image sensor
Effective Pixels	1984 (H) × 1105 (V) = 2,192,320 (Pixels)
Certifications	
CE	Yes
FCC	Yes
IP Rating	IP67
Vandal Resistant Rating	IK10
PC Requirements	
CPU	Intel® Core™ i3 or higher grade
OS	Windows 7 or above
RAM	1GB or above, Dedicated Graphics Card
Web browser	Microsoft® Internet Explorer® 9 or above
Mechanical	
Dimension	116(W) × 112(H) × 372(D) mm
Weight	1800g
Window	Ø82 heat resistant glass
Input / Output	
Audio Input / Output	Mono, 1.4 Vp-p, 50 KΩ, terminal connector
Audio	Two-way Audio, G.711 u-law / PCM, External Microphone Required
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, 75ohm, RCA connector
Video Streaming	
Video Compression	H.264, Motion JPEG
Video Streaming	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast; Multiple configurable streams in H.264 and Motion JPEG, configurable frame rate and bandwidth
Number of streams	4
Video Bitrate	128Kbps – 8Mbps; Frame rate and bit rate controllable on-the-fly; VBR / CBR / GOP supported

Network Security	
Authentication	RTSP authentication
Address Filter	IP address filter
Access	Multiple user access levels with password protection
Users	8 simultaneous users
Multi IP address	Yes
Video Resolutions (H x V)	
Resolution	2MP(1920 × 1080), 1MP(1280 × 720), D1(720 × 480, 720 × 576), CIF(352 × 240)
Maximum Frame Rate	H.264 : up to 30 fps @ 1920 × 1080 ; MJPEG : up to 15 fps @ 1920 × 1080
Video Functions	
Scanning System	Progressive Scan
Infrared Cut Filter	Auto / Day (Color) / Night (Mono) / Schedule
White Balance	Auto / Tungsten / Indoor / Fluorescents1 / Fluorescents2 / Outdoor1 / Outdoor2
Back Light Compensation	On / Off
Electrical Shutter	1/30(1/25)s – 1/8000s
Sense Up	Off / 1 frame / 2 frames / 3 frames / 7 frames
Sense Up+	Yes
Auto Gain Control	36 dB Variable Gain
3D Noise Reduction	Off / 1 – 32 Selectable
2D WDR	Off / Auto / x2 / x3 / x4
Privacy Masking	Off / On (4 zones)
Image Effects	Brightness, Contrast, Hue, Saturation, Sharpness, Mirror, Flip
Auto Focus	Yes
Integration	
Mobile Application	Integrated to LILIN mobile app (LILIN Pro) 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 card for circular recording (card is not included)
Maintenance	Firmware update via HTTP and IP Scan; Firmware available at website
IVS Basic 1.0	Face Detection, Motion Detection, Tampering Detection, Advanced Motion Detection, Traffic Light Detection, Tripwire Detection, Object Counting
Event Triggers	Face/ tampering/ audio /motion/ alarm detection
Event actions	FTP / SMTP / HTTP post / SD card / SAMBA
Alarm weighted mode	Yes
Network	
Ethernet	10/100 Mbps Base-T (Tx), RJ-45
ePTZ & Digital Zoom	Yes, ROI (Region of Interest)
OSD	Text overlay for date, time, and camera name
CPU, Memory	Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory
OS	Embedded Linux 2.6.32
Network Protocols	IPv4, IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, ICMP, IGMP, SNMP, SIP, ONVIF profile S, Bonjour
User accounts	8 simultaneous users
Video Display	LILIN Universal ActiveX & LILIN Java Applet