

Z3R6422AX3

1080P Day & Night Auto Focus IR Vandal Resistant Dome IP Camera



The LILIN Z3 series cameras are equipped with a high-performance CMOS sensor, featuring advanced 3D digital noise reduction (MCTF) and 2D WDR technology to ensure detailed and clear images under various lighting conditions. With high-efficiency infrared LEDs, the Z3 series delivers exceptional illumination in low-light environments and supports day and night functionality to meet diverse lighting needs. The zoom lens allows precise adjustment of the surveillance range and focus for enhanced image capture.

The Z3 series also includes digital PTZ (Pan, Tilt, Zoom) and ROI (Region of Interest) capabilities, providing flexible surveillance solutions. It supports intelligent video surveillance (IVS) features such as tamper detection, motion detection, and network disconnection detection, with customizable smart events to suit different application scenarios. Compatible with ONVIF Profile S, T, and G standards, and designed with waterproof and vandal-resistant construction, the Z3 series is a highly reliable choice for professional surveillance systems.

1080P

ONVIF® S T G

- Full HD 2 megapixel CMOS image sensor
- 2MP H.265/HEVC and H.264/AVC high-performance video compression
- Simultaneous streaming of H.265 and H.264 encoded streams
- Auto focus with zoom / focus motorized lens
- Smart H.264/H.265 supported
- 3D noise reduction (MCTF)
- 2D WDR function
- HDR function up to 120dB
- Digital PTZ supported
- IVS supported
- Tampering / Alarm / Motion / Network lost detection event function
- SMART event
- High efficiency IR LED, radiant distance up to 30m
- Day & Night (IR cut removable)
- 2-way audio supported
- Digital I/O : 1 in, 1 out
- Impact Resistant Polycarbonate Dome Cover
- 3-Axis construction
- ONVIF Profile S, Profile T and Profile G supported
- IP67 rain and dust resistant
- Vandal resistant approve



Video Performance	
Min. Illumination	Color : 0.01 Lux at F1.8 ; B/W : 0.002 Lux at F1.8 ; 0 Lux with IR LED ON
Lens / Night Vision (Infrared LED)	
Focal Length	2.8 – 12 mm (zoom / focus motorized)
Iris	F1.8 (W) – F3.3 (T)
Iris Control	Fixed IRIS
Angle of View	101.5° (W) – 39.0° (T) (H) , 55.6° (W) – 21.8° (T) (V) , 121.5° (W) – 44.6° (T) (D)
Peak Wavelength	850nm
Beam Spread	60° , 90°
Radiant Distance	30M
Sensor	
Pick Up Element	1/2.8" CMOS image sensor
Effective Pixels	1945 (H) × 1097 (V) = 2,133,665 (Pixels)
Light Sensor	Yes
Certifications	
CE / FCC	Yes, EMI Class A
IP Rating	IP67
Vandal Resistant Rating	IK10
UL	Yes
PC Requirements	
CPU	Intel® Core™ i7 or higher grade
OS	Windows 7 or above
RAM	8GB or above, dedicated graphics card
Web Browser	Microsoft® Internet Explorer® 9 or above Microsoft® Edge (IE mode)
Input / Output	
Audio Input / Output	Mono, 1.98 Vp-p , 2.2KΩ , Terminal Block
Audio	Two-way Audio, G.711 u-law / PCM / AAC, SIP, External Microphone Required
Alarm Input / Output	Digital 1 input (TTL, +3 – 5VDC) / 1 Output (MOS Relay contact N.O., Load.max. 40VDC,450mW/300mA,450mW), Terminal block
Video Streaming	
Video Compression	H.265/HEVC main profile, H.264 main and high profile, Motion JPEG
Video Streaming	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast 4 configurable streams in H.265 and H.264 and Motion JPEG, configurable frame rate and bandwidth
Number of Streams	4
Video Bitrate	128Kbps – 12Mbps; Frame rate and bit rate controllable on-the-fly; VBR / CBR / GOP supported, Fixed bitrate, Smart H.264/H.265
Network Security	
Encryption	Base64 HTTP encryption, HTTPS encryption, DDNS via HTTPS
Authentication	Digest HTTP authentication, RTSP authentication, TLS, 802.1x, DDNS via HTTPS
Address Filter	IP address filter, MAC address filter
Access	Multiple user access levels with password protection
User accounts	10 user accounts available
Multi IP Address	Yes
Video Resolutions (H x V)	
Resolution	2MP(1920 × 1080), 1.3MP(1280 × 960), 1MP(1280 × 720), D1(720 × 480, 720 × 576), VGA(640 × 480), CIF(352 × 240)
Maximum Frame Rate	Normal mode 60Hz: 30 fps @ 1920 × 1080 50Hz: 25 fps @ 1920 × 1080 HDR mode 60Hz: 30 fps @ 1920 × 1080 50Hz: 25 fps @ 1920 × 1080
Video Functions	
Scanning System	Progressive Scan
Infrared Cut Filter	Auto / Day (Color) / Night (Mono) / Schedule
White Balance	ATW-NARROW / ATW-WIDE / AWC(MANUAL)
Back Light Compensation	Yes
Electrical Shutter	1/30(1/25)s – 1/30000s
Sense Up	Off / x2 / x4 / x8 / x16 / x32
Sense Up+	Yes

Auto Gain Control	60 dB Variable Gain
S/N Ratio	More than 50dB (AGC off)
3D Noise Reduction	Off / 1 – 32 Selectable
2D WDR	Off / Auto / x2 / x3 / x4 (by normal mode) Support Onvif
High Dynamic Range	Up to 120dB (by HDR mode, 2 shutter line interleave)
Privacy Masking	Off / On (4 zones)
Image Effects	Brightness, Contrast, Hue, Saturation, Sharpness, Mirror, Flip, Rotation, Overexposure Reduction
Auto Focus	One Push
EV (Exposure Value)	Adjustable
Lens distortion correction (LDC)	Yes
Integration	
Mobile Application	Integrated to LILIN mobile app (LILIN Pro), iPhone, iPad, Android support
Video Management	ONVIF Profile S / ONVIF Profile T / ONVIF Profile G / IVS events, LILIN Navigator Enterprise 5.0 support, Third party VMS through LILIN HTTP API
SD Card Recording	Support Micro SD/SDHC/SDXC card for circular recording (card is not included)
SD Card Compatible List	Micron - 32GB,64GB,128GB,256GB,512GB, 1TB (SDXC, U1, C10) Transcend - 4GB SD,8GB SDHC,32GB SDHC C10,128GB SDXC C10 SanDisk - 8GB SDHC, 32GB, 64GB, 128GB SDHC C10 Kingston - 64GB SDXC C10
Maintenance	Firmware update via HTTP and IP Scan; Firmware available at website
IVS Basic 1.0	Motion Detection, Tampering Detection, Advanced Motion Detection, Traffic Light Detection, Tripwire Detection, Object Counting
IVS Advanced 2.1 (Optional)	Unattended Object Detection, Missing Object Detection, Crowd Detection, Loitering Detection, Face Detection
IVS Advanced 2.2 (Optional)	Detection Zone for Car and Human
Event Triggers	Motion / Tamper / Alarm / Network lost detection / SmartEvent
Event actions	FTP / SMTP / HTTP post / SD card / SAMBA / Alarm / SNMP Trap / Push service notification
Languages	English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungarian, Japanese
Network	
Ethernet	10/100 Mbps Base-T (Tx), RJ-45
ePTZ & Digital Zoom	Yes, ROI (Region of Interest)
OSD	Position configurable text overlay for date, time, camera ID, event status and watermark with customizable user demand data
CPU, Memory	Embedded SoC ARM Cortex-A9, 816MHz, 512MB DDR3L, 256MB flash memory
OS	Embedded Linux 3.10
Network Protocols	IPv4, IPv6, TCP, UDP, HTTP, HTTPS, SMTP, MQTT, QoS, SNMP V1/V2/V3, SNMP Trap and heart beat, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, ONVIF Profile T, ONVIF Profile G, SDDP, Bonjour , 802.1x, SSL/TLS
Max number of online users	10 simultaneous users
Video Display	LILIN Universal ActiveX , LILIN Java Applet
Watermark	BMP logo
Log	Event & operation log & IVS event log
Schedule	Support holiday list
Network Storage	NAS (Support SAMBA/CIFS)
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 802.3af compliant)
Power Consumption	DC12V, 6.9W / PoE, 8.0W
Mechanical	
Dimension	Ø120 × 106 mm
Weight	760g
Casing Material	Aluminum alloy
Warranty	
Warranty	3 Year(s)

Bracket



BCR03W
Wall-mount

Bracket



BCR04W
Wall-mount

Bracket



BCR06W
Wall-mount

Bracket



BTD01W
Wall-mount

Bracket



BTD04W
Wall-mount

Bracket



BTR07W
Wall-mount