

# ZMR8142X2-P 4MP Day & Night Auto Focus IR Bullet IP Camera

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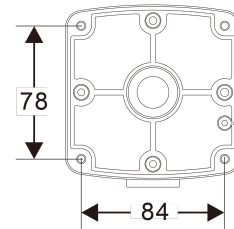
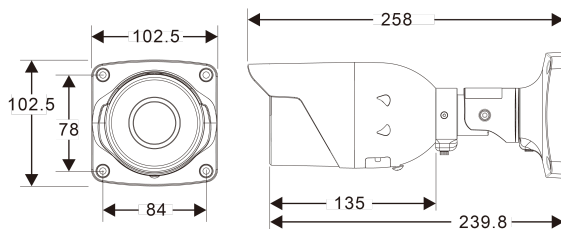


- ▶ Full HD 4 megapixel CMOS image sensor
- ▶ 4MP True H.264 AVC High Profile video compression
- ▶ H.264 and Motion JPEG multi-profile video streaming
- ▶ Auto focus with zoom / focus motorized lens
- ▶ P-IRIS supported
- ▶ Smart H.264 supported
- ▶ 3D noise reduction (MCTF)
- ▶ 2D WDR function
- ▶ HDR function up to 100dB
- ▶ Digital PTZ supported
- ▶ IVS supported
- ▶ Tampering / Motion detection alarm function
- ▶ High efficiency IR LED, radiant distance up to 55m
- ▶ Day & Night (IR cut removable)
- ▶ 2-way audio supported
- ▶ Digital I/O : 1 in, 1 out
- ▶ Cable managed housing and bracket
- ▶ ONVIF Profile S supported
- ▶ IP68 rain and dust resistant

## Dimensions

102.5(W) × 102.5(H) × 258(D) mm

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



## Wind and Rain Standards

Meet international IP68 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

ZMR8142X2-P 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



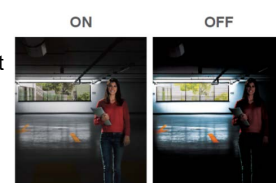
## 3D Noise Reduction

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



## High Dynamic Range

An High Dynamic Range (HDR) 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. HDR 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



## 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 – LILIN Pro app provides security alarm push notification, real-time live viewing, and remote video playback



## SD Cards in Sync with NAV Software

ZMR8142X2-P 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)



## Alarm Detection

Alarm Detection is designed to provide the electronic detection of intruders



| 4MP Day & Night Auto Focus IR Bullet IP Camera |                                                                                                                          |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Video Performance                              |                                                                                                                          |
| Model                                          | ZMR8142X2-P                                                                                                              |
| Min. Illumination                              | Color : 0.3 Lux at F1.8 ; B/W : 0.06 Lux at F1.8 ; 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, 13W / PoE+, 14W                                                                                                   |
| Lens / Night vision (infrared LED)             |                                                                                                                          |
| Focal Length                                   | 7.0 – 22 mm (zoom / focus motorized)                                                                                     |
| Iris                                           | F1.8(W) – F2.8(T)                                                                                                        |
| Iris Control                                   | P-IRIS                                                                                                                   |
| Angle of View                                  | 42° (W) – 15° (T) (H) 22° (W) – 9° (T) (V) 47° (W) – 18° (T) (D)                                                         |
| Peak Wavelength                                | 850nm                                                                                                                    |
| Beam Spread                                    | 60°, 90°                                                                                                                 |
| Radiant Distance                               | 55M                                                                                                                      |
| Sensor                                         |                                                                                                                          |
| Pick Up Element                                | 1/3" CMOS image sensor                                                                                                   |
| Effective Pixels                               | 2688 (H) × 1520 (V) = 4,085,760 (pixels)                                                                                 |
| Chip Size                                      | 7.60mm (H) x 5.80mm (V)                                                                                                  |
| Certifications                                 |                                                                                                                          |
| CE                                             | Yes                                                                                                                      |
| FCC                                            | Yes                                                                                                                      |
| IP Rating                                      | IP68                                                                                                                     |
| Vandal Resistant Rating                        | IK10                                                                                                                     |
| PC Requirements                                |                                                                                                                          |
| CPU                                            | Intel® Core™ i3 or higher grade                                                                                          |
| OS                                             | Windows 7 or above                                                                                                       |
| RAM                                            | 4GB or above, Dedicated Graphics Card                                                                                    |
| Web browser                                    | Microsoft® Internet Explorer® 9 or above                                                                                 |
| Mechanical                                     |                                                                                                                          |
| Dimension                                      | 103(W) × 103(H) × 258(D) mm                                                                                              |
| Weight                                         | 1150g approx.                                                                                                            |
| Window                                         | Ø75 Heat Resistant Glass                                                                                                 |
| Input / Output                                 |                                                                                                                          |
| Audio Input / Output                           | Mono, 1.98 Vp-p , 2.2KΩ , Terminal Block                                                                                 |
| Audio                                          | Two-way Audio, G.711 u-law / PCM / AAC, External Microphone Required                                                     |
| Alarm Input / Output                           | Digital 1 input (TTL, +3 – 5VDC) / 1 Output (MOS Relay contact N.O., Load max. 40VDC/300mA), Terminal block              |
| Live Video Output                              | CVBS 1.0Vp-p, 75 ohm, connector                                                                                          |
| Video Streaming                                |                                                                                                                          |
| Video Compression                              | H.264 main and high profile, Motion JPEG                                                                                 |
| Video Streaming                                | RTP/HTTP, RTP/TCP, RTP/UDP, Multicast                                                                                    |
| 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 |
| Warranty                                       |                                                                                                                          |
| Warranty                                       | 3 Year(s)                                                                                                                |

| Network Security           |                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Encryption                 | Base64 HTTP encryption, HTTPS encryption                                                                                                                                                                    |
| Authentication             | Digest HTTP authentication, RTSP authentication, 802.1x, DDNS via HTTPS                                                                                                                                     |
| Address Filter             | IP address filter, MAC address filter                                                                                                                                                                       |
| Access                     | Multiple user access levels with password protection                                                                                                                                                        |
| User accounts              | 10 simultaneous users                                                                                                                                                                                       |
| Multi IP address           | Yes                                                                                                                                                                                                         |
| Video Resolutions (H x V)  |                                                                                                                                                                                                             |
| Resolution                 | 4MP(2688 × 1520), 3.6MP(2560 × 1440), 3MP(2304 × 1296), 2MP(1920 × 1080), 1.3MP(1280 × 960), 1MP(1280 × 720), D1(720 × 480, 720 × 576), VGA(640 × 480), CIF(352 × 240)                                      |
| Maximum Frame Rate         | H.264 / MJPEG : up to 20 fps @ 2688 × 1520                                                                                                                                                                  |
| Video Functions            |                                                                                                                                                                                                             |
| Scanning System            | Progressive Scan                                                                                                                                                                                            |
| Infrared Cut Filter        | Auto / Day (Color) / Night (Mono) / Schedule                                                                                                                                                                |
| White Balance              | Auto / Tungsten / Indoor / Fluorescents1 / Fluorescents2 / Outdoor1 / Custom                                                                                                                                |
| Electrical Shutter         | 1/30(1/25)s – 1/20000s                                                                                                                                                                                      |
| Sense Up                   | Off / 1 Frame / 2 Frames                                                                                                                                                                                    |
| Sense Up+                  | Yes                                                                                                                                                                                                         |
| Auto Gain Control          | 36 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)                                                                                                                                                                  |
| High Dynamic Range         | Up to 100dB (by HDR mode, 2 shutter line interleave)                                                                                                                                                        |
| Privacy Masking            | Off / On (4 zones)                                                                                                                                                                                          |
| Image Effects              | Brightness, Contrast, Hue, Saturation, Sharpness, Mirror, Flip, Lens Distortion Correction                                                                                                                  |
| Auto Focus                 | One Push                                                                                                                                                                                                    |
| Integration                |                                                                                                                                                                                                             |
| Mobile Application         | Integrated to LILIN mobile app (LILIN Pro) iPhone, iPad, Android support                                                                                                                                    |
| Video Management           | ONVIF Profile S, LILIN Navigator Enterprise 5.0, Third party VMS through LILIN HTTP API                                                                                                                     |
| SD Card Recording          | Support Micro SD/SDHC/SDXC card for circular recording (card is not included)                                                                                                                               |
| 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                                                                              |
| Event Triggers             | Motion / Tamper / Audio / Alarm / Network lost detection                                                                                                                                                    |
| Event actions              | FTP / SMTP / HTTP post / SD card / SAMBA / SMTP Trap / Alarm Output                                                                                                                                         |
| 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                        | Text overlay for date, time, and camera name                                                                                                                                                                |
| CPU, Memory                | Embedded SoC ARM Cortex-A9, 600MHz, 256MB DDR3, 256MB flash memory                                                                                                                                          |
| OS                         | Embedded Linux 3.10                                                                                                                                                                                         |
| Network Protocols          | IPv4, IPv6, TCP, UDP, HTTP, HTTPS, SMTP, SIP, MQTT, QoS, SNMP, SNMP Trap, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, SDDP, Bonjour, SIP, 802.1x, SSL/TLS |
| Max number of online users | 10 simultaneous users                                                                                                                                                                                       |
| Video Display              | LILIN Universal ActiveX & HTML5                                                                                                                                                                             |