

# Z78

## 2MP Deep Learning AI f2.8mm Outdoor Fixed Turret with IR LED 50m, WDR 120dB



- 2 Megapixel, f2.8mm, Fixed Turret
- Deep Learning AI
- IR LED 50m, Superior WDR (120 dB)
- Color Min. Illumination 0.001 lux
- Smart Motion Detection
- Weatherproof (IP68), Vandal proof (IK10), UL Listed

## Specifications

### Product Profile

|                          |                                                                |
|--------------------------|----------------------------------------------------------------|
| Product Type             | Fixed Turret                                                   |
| Application Environment  | Outdoor                                                        |
| Maximum Resolution       | 2MP                                                            |
| Image Sensor             | Progressive Scan CMOS                                          |
| Sensor Size              | 1/2.7 "                                                        |
| Day / Night              | Yes                                                            |
| Low Light Sensitivity    | Extreme                                                        |
| Minimum Illumination     | Color: 0.001 lux at F2.0 (AGC on); B/W: 0 lux (IR LED on)      |
| Mechanical IR Cut Filter | Yes                                                            |
| IR LED                   | Adaptive IR LED (850 nm)                                       |
| IR Working Distance      | 50m                                                            |
| Electronic Shutter       | 1-1/100000 second (manual mode); 1-1/100000 second (auto mode) |
| S/N Ratio                | 75 dB                                                          |

### Lens

|              |                     |
|--------------|---------------------|
| Focal Length | Fixed focal, f2.8mm |
|--------------|---------------------|

|                          |                                               |
|--------------------------|-----------------------------------------------|
| Aperture                 | F2.0                                          |
| Iris                     | Fixed iris                                    |
| Focus                    | Fixed focus                                   |
| Lens Mount               | Board mount                                   |
| Horizontal Viewing Angle | 108.6°                                        |
| Vertical Viewing Angle   | 62.7°                                         |
| Viewing Angle Adjustment | Pan: 0°-360°, Tilt: 0°-80°, Rotation: 0°-360° |

## Video

|                                   |                                                                                                                       |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Compression                       | H.265 Adaptive Stream, H.264 (Baseline/ Main/ High profile), MJPEG                                                    |
| Maximum Frame Rate vs. Resolution | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 720 x 576 30 fps at 640 x 360                                    |
| Multi-Streaming                   | Simultaneous dual streams                                                                                             |
| Digital Noise Reduction           | 2D + 3D DNR                                                                                                           |
| Wide Dynamic Range                | Superior WDR (120 dB)                                                                                                 |
| Image Orientation                 | Flip, Mirror, Rotation (Corridor mode)                                                                                |
| Image Enhancement                 | White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control (AGC), Defogging |
| Privacy Mask                      | 4 configurable regions                                                                                                |
| Text Overlay                      | Yes                                                                                                                   |
| Built-in Analytics                | Smart Motion Detection (People Detection, Vehicle Detection), People Detection, Vehicle Detection                     |

## Analytics

|                  |     |
|------------------|-----|
| Deep Learning AI | 1.0 |
|------------------|-----|

## Audio

|                   |                            |
|-------------------|----------------------------|
| Audio Type        | 1-way, Built-in Microphone |
| Audio Compression | G.711                      |

## Network

|                            |                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Network Protocol & Service | IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, RTMP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, SSL, QoS, TLS 1.2 |
| Ethernet Port              | 1 x Ethernet (10/100 Base-T), RJ-45 pigtail connector                                                                               |
| Security                   | IP address filtering, HTTPS encryption, Password protected user level                                                               |

## Event

|                |                                                                                                      |
|----------------|------------------------------------------------------------------------------------------------------|
| Event Trigger  | Video motion detection (4 regions), Sound detection, Intelligent event detection                     |
| Event Response | E-mail notification with snapshots, Upload snapshot to FTP server, Save video or snapshot to storage |

## Integration

|                 |                                                   |
|-----------------|---------------------------------------------------|
| Edge Recording  | Support (integration with NVR by ONVIF Profile G) |
| ONVIF Compliant | Yes, Profile S, Profile G, Profile T              |

|             |                                               |
|-------------|-----------------------------------------------|
| Web Browser | IE 11, Google Chrome, Microsoft Edge, Firefox |
|-------------|-----------------------------------------------|

## Interface

|                  |    |
|------------------|----|
| Operating Button | No |
|------------------|----|

## General

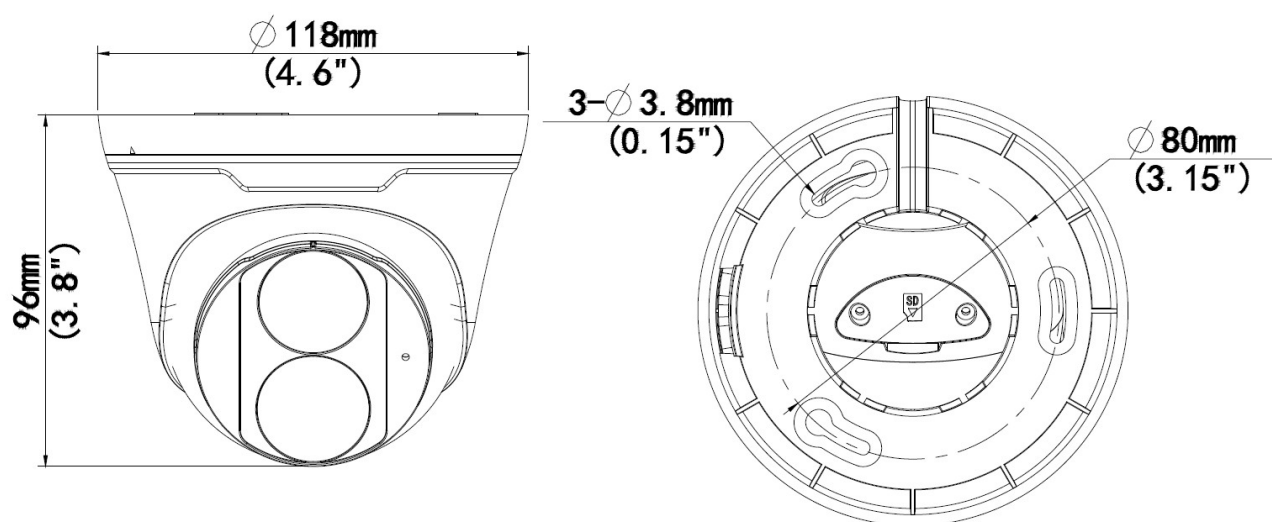
|                       |                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Power Source          | DC 12V, PoE (IEEE802.3af)                                                                                                              |
| Power Consumption     | 7 W (PoE)                                                                                                                              |
| Dimensions            | (Ø x H): 118mm x 96mm (4.6" x 3.8")                                                                                                    |
| Environmental Casing  | Weatherproof (IP68), Vandal proof (IK10)                                                                                               |
| Corrosion Protection  | Optional for project request. Chassis corrosion resistance at the seashore approximately 3 years.                                      |
| Operating Temperature | -40°C ~ 60°C (-40°F ~ 140°F)                                                                                                           |
| Operating Humidity    | 10% - 95% RH, non-condensing                                                                                                           |
| Surge Protection      | 4KV                                                                                                                                    |
| Approvals             | CE Class B, FCC Class B, IP68, IK10 (metal casing), UL Listed                                                                          |
| Color                 | White                                                                                                                                  |
| Real-time Clock (RTC) | No                                                                                                                                     |
| Warranty              | 2 Year(s). For extended warranty offering, see <a href="http://www.acti.com/support/warranty">http://www.acti.com/support/warranty</a> |

\* Edge Recording function is integrated with NVR 3 Corporate / NVR 3 Business / INR / GNR series.

## Photo Indication



## Dimension Diagram



Unit: mm [inch]

## Related Products

### Mounting Accessories - Camera Mount

|           |                                                                                   |                                                                                  |
|-----------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| PMAX-0128 |  | Pendant Mount (for Z5x, Z724, Z85, Z86, Z87, Z810, Z972, Q550)                   |
| PMAX-0349 |  | Wall Mount with Built-in Junction Box (for Z71, Z72)                             |
| PMAX-0365 |  | Wall Mount with Built-in Junction Box (for Y7x, Z5x, Z7x, Z91x)                  |
| PMAX-0532 |  | Pole Mount (for Z5x, Z724, Z8x, Z9x, Z972, A7X, Q550), supports 2.6" to 5" Poles |
| PMAX-0727 |  | Junction Box (for Z71, Z72)                                                      |

**Note:** Some mounting accessories may need additional accessories for installation. Please check [www.acti.com/mountingselector](http://www.acti.com/mountingselector) for more information.

### Power Supply Accessories - Power Adapter

|           |                                                                                     |                                                                                      |
|-----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| PPBX-0013 |    | Power Adapter AC 100~240V (EU), for A3x, A4x, A88, A9x, Z31, Z8x, Z9x                |
| PPBX-0014 |   | Power Adapter AC 100~240V (UK), for A3x, A4x, A88, A9x, Z31, Z8x, Z9x                |
| PPBX-0026 |  | Power Adapter AC 100~240V (US), for A3x, A4x, A7x, A88, A9x, Z3x, Z4x, Z7x, Z8x, Z9x |

### Power Supply Accessories - PoE Injector

|           |                                                                                     |                                                                                                                                                          |
|-----------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| PPOE-0107 |  | High PoE Injector IEEE 802.3at compliant, AC 100~240V, with universal connectors (for A416, A418, B913, B923, B934, Q450, Q75, VMGB-60X, Z37, Z71, Z952) |
|-----------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|