# **Z85**



### 2MP Outdoor Zoom Dome with D/N, Adaptive IR, Superior WDR, SLLS, 4.3x Zoom Lens

- 2 Megapixel
- Day & Night with Superior Low Light Sensitivity and Adaptive IR LED
- Superior WDR
- H.265 Compression
- Super wide angle
- Built-in Analytics
- Event trigger, response and notification

## Specifications

#### **Device**

Device	
Product Type	Zoom Dome
Maximum Resolution	2MP
Application Environment	Outdoor
Image Sensor	Progressive Scan CMOS
Sensor Size	1/2.7 "
Day / Night	Yes
Low Light Sensitivity	Superior
Minimum Illumination	Color: 0.005 lux at F1.6 (AGC on); B/W: 0 (IR LED on)
Mechanical IR Cut Filter	Yes
IR LED	Adaptive IR LED x 2 (850 nm)
IR Working Distance	40m
S/N Ratio	52 dB

#### Lens

Focal Length	Zoom, f2.8-12mm
Aperture	F1.6

Compression H.265, H.264 (Baseline/ Main/ High profile), MJPEG  Maximum Frame Rate vs. Resolution 230 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 720 x 576 30 fps at 704 x 288 30 fps at 640 x 360 30 fps at 352 x 288  Multi-Streaming Simultaneous dual streams  Wide Dynamic Range Superior WDR (120 dB)  Image Enhancement White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging Digital Noise Reduction 2D + 3D DNR  Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type 1-way, Built-in Microphone G.711  Network  Network Protocol & Service Protocol & Service Pry, CDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Zoom Dome	
Zoom Application         Camera Installation           Focus         Auto focus           Horizontal Viewing Angle         102.1° - 33°           Vertical Viewing Angle         56° - 18.7°           Viewing Angle Adjustment         Pan: 3°-360°, Tilt: 0°-70°, Rotation: 3°-360°           Video         Viewing Angle Adjustment         H.265, H.264 (Baseline/ Main/ High profile), MJPEG           Compression         H.265, 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 704 x 288 30 fps at 640 x 360 30 fps at 352 x 288           Multi-Streaming         Simultaneous dual streams           Wide Dynamic Range         Superior WDR (120 dB)           Image Enhancement         White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging           Digital Noise Reduction         2D + 3D DNR           Privacy Mass         4 configurable regions           Text Overlay         Yes           Built-in Analytics         Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)           Image Orientation         Filip, Mirror, Rotation (Corridor mode)           Audio Type         1-way, Built-in Microphone           Audio Compression         G.711           Network <td>Zoom Ratio</td> <td>4 3v ontical zoom</td>	Zoom Ratio	4 3v ontical zoom
Focus Auto focus  Horizontal Viewing Angle  102.1° - 33°  Vertical Viewing Angle  56° - 18.7°  Pan: 3°-360°, Tilt: 0°-70°, Rotation: 3°-360°  Video  Compression  H.265, H.264 (Baseline/ Main/ High profile), MJPEG  Maximum Frame Rate vs. Resolution  Multi-Streaming  Simultaneous dual streams  Wide Dynamic Range  Superior WDR (120 dB)  Image Enhancement  White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction  2D + 3D DNR  Privacy Mask  4 configurable regions  Text Overlay  Yes  Built-in Analytics  Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation  Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type  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, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector		
Horizontal Viewing Angle  102.1° - 33°  Vertical Viewing Angle  56° - 18.7°  Viewing Angle Adjustment  Par: 3°-360°, Tilt: 0°-70°, Rotation: 3°-360°  Video  Compression  H.265, H.264 (Baseline/ Main/ High profile), MJPEG  Maximum Frame Rate vs. Resolution  280 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 720 x 576 30 fps at 704 x 288 30 fps at 640 x 360 30 fps at 352 x 288  Multi-Streaming  Simultaneous dual streams  Wide Dynamic Range  Superior WDR (120 dB)  Image Enhancement  White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction  20 + 30 DNR  Privacy Mask  4 configurable regions  Text Overlay  Yes  Built-in Analytics  Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation  Flip, Mirror, Rotation (Corridor mode)  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, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector		
Vertical Viewing Angle 56° - 18.7°  Viewing Angle Adjustment Pan: 3°-360°, Tilt: 0°-70°, Rotation: 3°-360°  Video  Compression H.265, H.264 (Baseline/ Main/ High profile), MJPEG  Maximum Frame Rate vs. Resolution 228  Multi-Streaming Simultaneous dual streams  Wide Dynamic Range Superior WDR (120 dB)  Image Enhancement White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction 2D + 3D DNR  Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Filip, Mirror, Rotation (Corridor mode)  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, SMTP, FTP, IGMP, ICMP, ARP, UPPP, SMMP, QoS, SSL  Eithernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector		
Video  Video  Compression H.265, H.264 (Baseline/ Main/ High profile), MJPEG  Maximum Frame Rate vs. Resolution  Multi-Streaming Simultaneous dual streams  Wide Dynamic Range Superior WDR (120 dB)  Image Enhancement White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction 2D + 3D DNR  Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio Type 1-way, Built-in Microphone  Audio Type 1-way, Built-in Microphone  G.711  Network  Network Protocol & Service Park 1 x Ethernet (10/100 Base-T), RJ-45 connector		
Video  Compression H.265, H.264 (Baseline/ Main/ High profile), MJPEG  Maximum Frame Rate vs. Resolution 288  Multi-Streaming Simultaneous dual streams  Wide Dynamic Range Superior WDR (120 dB)  Image Enhancement White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction 2D + 3D DNR  Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio Type 1-way, Built-in Microphone 3C, 711  Network  Network Protocol & Service Protocol & Service Protocol & Service 1 x Ethernet (10/100 Base-T), RJ-45 connector		
Compression H.265, H.264 (Baseline/ Main/ High profile), MJPEG  Maximum Frame Rate vs. Resolution 230 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 720 x 576 30 fps at 704 x 288 30 fps at 640 x 360 30 fps at 352 x 288  Multi-Streaming Simultaneous dual streams  Wide Dynamic Range Superior WDR (120 dB)  Image Enhancement White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging Digital Noise Reduction 2D + 3D DNR  Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio Type 1-way, Built-in Microphone G.711  Network  Network Protocol & Service Protocol & Service Protocol & Service 1-x Ethernet (10/100 Base-T), RJ-45 connector		Pan: 3°-360°, Tilt: 0°-70°, Rotation: 3°-360°
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 704 x 288 30 fps at 640 x 360 30 fps at 352 x 288  Multi-Streaming  Simultaneous dual streams  Wide Dynamic Range  Superior WDR (120 dB)  Image Enhancement  White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction  2D + 3D DNR  Privacy Mask  4 configurable regions  Text Overlay  Yes  Built-in Analytics  Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation  Filp, Mirror, Rotation (Corridor mode)  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, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector	Video	
Resolution 288  Multi-Streaming Simultaneous dual streams  Wide Dynamic Range Superior WDR (120 dB)  Image Enhancement White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction 2D + 3D DNR  Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type 1-way, Built-in Microphone  Audio Compression G.711  Network  Network  Network Protocol & Service IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Compression	H.265, H.264 (Baseline/ Main/ High profile), MJPEG
Wide Dynamic Range  Superior WDR (120 dB)  Image Enhancement  White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  Digital Noise Reduction  2D + 3D DNR  Privacy Mask  4 configurable regions  Text Overlay  Yes  Built-in Analytics  Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation  Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type  1-way, Built-in Microphone  Audio Compression  G.711  Network  Network  Network Protocol & Service  IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector		
Image Enhancement White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging  2D + 3D DNR  Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type 1-way, Built-in Microphone  Audio Compression G.711  Network  Network  Network Protocol & Service   IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Multi-Streaming	Simultaneous dual streams
Digital Noise Reduction  2D + 3D DNR  Privacy Mask  4 configurable regions  Text Overlay  Yes  Built-in Analytics  Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation  Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type  1-way, Built-in Microphone  Audio Compression  G.711  Network  Network  Network Protocol & Service  IPV4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector	Wide Dynamic Range	Superior WDR (120 dB)
Privacy Mask 4 configurable regions  Text Overlay Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio Type 1-way, Built-in Microphone Audio Compression G.711  Network  Network  Network Protocol & Service IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Image Enhancement	White Balance, Backlight compensation (BLC), Brightness, Contrast, Sharpness, Automatic gain control, Defogging
Text Overlay  Yes  Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type 1-way, Built-in Microphone Audio Compression G.711  Network  Network  IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Digital Noise Reduction	2D + 3D DNR
Built-in Analytics Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)  Image Orientation Flip, Mirror, Rotation (Corridor mode)  Audio  Audio Type 1-way, Built-in Microphone  Audio Compression G.711  Network  Network  IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Privacy Mask	4 configurable regions
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Audio Type 1-way, Built-in Microphone G.711  Network  Network Protocol & Service IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Built-in Analytics	Tampering Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)
Audio Type 1-way, Built-in Microphone G.711  Network  Network Protocol & Service IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Image Orientation	Flip, Mirror, Rotation (Corridor mode)
Audio Compression  Retwork  Network Protocol & Service  IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector	Audio	
Network  Network Protocol & Service  IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector	Audio Type	1-way, Built-in Microphone
Network Protocol & Service  IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, SNMP, QoS, SSL  Ethernet Port  1 x Ethernet (10/100 Base-T), RJ-45 connector	Audio Compression	G.711
UPnP, SNMP, QoS, SSL  Ethernet Port 1 x Ethernet (10/100 Base-T), RJ-45 connector	Network	
	Network Protocol & Service	
Security IP address filtering, HTTPS encryption, Password protected user level	Ethernet Port	1 x Ethernet (10/100 Base-T), RJ-45 connector
3, 1, 1	Security	IP address filtering, HTTPS encryption, Password protected user level
Event	Event	
Event Trigger Video motion detection, Sound detection, Intelligent event detection	Event Trigger	Video motion detection, Sound detection, Intelligent event detection
Event Response E-mail notification with snapshots, Upload snapshot to FTP server, Save video or snapshot to local storage	Event Response	E-mail notification with snapshots, Upload snapshot to FTP server, Save video or snapshot to local storage
Integration		
Edge Recording Support (integration with NVR by ONVIF Profile G)		Support (integration with NVR by ONVIF Profile G)
ONVIF Compliant  Yes, Profile S, Profile T	ONVIF Compliant	Yes, Profile S, Profile G, Profile T

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Interface	
Local Storage	MicroSD Memory Card Slot (card not included, up to 256GB, Kingston or Sandisk only)

#### **Zoom Dome**

Operating Button Reset Button

#### General

General	
Power Source	DC 12V, PoE (IEEE802.3af)
Power Consumption	7.5 W (PoE)
Weight	785g (1.73lb)
Dimensions	(Ø x H): 128mm x 100mm (5.0" x 3.9")
Environmental Casing	Weatherproof (IP68), Vandal proof metal casing (IK10)
Operating Temperature	-30°C ~ 60°C (-22°F ~ 140°F)
Approvals	CE Class B, FCC Class B, IP68, IK10 (metal casing)
Real-time Clock (RTC)	No
Warranty	2 Year(s). For extended warranty offering, see http://www.acti.com/support/warranty

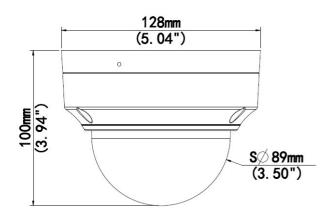
 $<sup>^{\</sup>star}$  Edge Recording function is integrated with NVR 3 Corporate / NVR 3 Business / INR / GNR series.

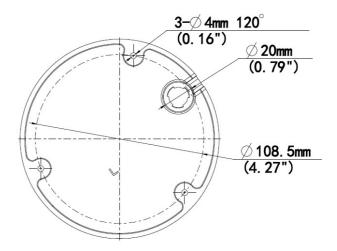
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## Photo Indication



## Dimension Diagram





Unit: mm [inch]

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#### Related Products

#### **Mounting Accessories - Camera Mount**

 PMAX-0128
 Pendant Mount (for Z85, Z86, Z87, Z810)

 PMAX-0323
 Wall Mount with Built-in Junction Box (for Z91, Z94, Z95, Z77, Z81, Z82, Z85, Z86)

 PMAX-0527
 Pole Mount (for Z4x, Z710, Z8x, Z9x, A7x), supports 2.64" to 5" Poles

 PMAX-0532
 Pole Mount (Z710, Z8x, Z9x, A7x), supports 2.6" to 5" Poles

 PMAX-0713
 Junction box (for Z81, Z82)

Note: Some mounting accessories may need additional accessories for installation. Please check www.acti.com/mountingselector for more information.

#### **Power Supply Accessories - PoE Injector**

PPOE-0002 PoE Injector IEEE 802.3af compliant, AC 100~240V, with universal connectors