# **Z84**



### 4MP Outdoor Zoom Dome with D/N, Adaptive IR, Superior WDR, SLLS, 4.3x Zoom Lens

- 4 Megapixel
- Day & Night with Superior Low Light Sensitivity and Adaptive IR LED
- 4.3x Zoom Lens with f2.8-12/F1.6, Auto focus (for installation)
- Superior WDR
- H.265 Compression
- Wide Angle
- Event trigger, response and notification

# Specifications

#### Device

Application Environment Outdoor Image Sensor Progressive Scan CMOS Sensor Size 1/3 "  Effective Pixels 2688(H) X 1520(V) (4.09 MP)  Day / Night Yes Low Light Sensitivity Superior Minimum Illumination Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter Yes IR LED Adaptive IR LED IR Working Distance Electronic Shutter  4MP  Outdoor  Adaptive IR LED Adaptive IR LED 1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Device		
Application Environment Image Sensor Progressive Scan CMOS Sensor Size 1/3 "  Effective Pixels 2688(H) X 1520(V) (4.09 MP)  Day / Night Yes Low Light Sensitivity Superior Minimum Illumination Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter IR LED Adaptive IR LED IR Working Distance Electronic Shutter  Outdoor Progressive Scan CMOS  Available  Available  Progressive Scan CMOS  Available  Progre	Product Type	Zoom Dome	
Image Sensor  Progressive Scan CMOS  Sensor Size  1/3 "  Effective Pixels  2688(H) X 1520(V) (4.09 MP)  Day / Night  Yes  Low Light Sensitivity  Superior  Minimum Illumination  Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter  Yes  IR LED  Adaptive IR LED  IR Working Distance  40m  Electronic Shutter  Progressive Scan CMOS  Alight Sensitivity  Adaptive IR LED  Adaptive IR LED  1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Maximum Resolution	4MP	
Sensor Size 1/3 "  Effective Pixels 2688(H) X 1520(V) (4.09 MP)  Day / Night Yes  Low Light Sensitivity Superior  Minimum Illumination Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter Yes  IR LED Adaptive IR LED  IR Working Distance 40m  Electronic Shutter 1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Application Environment	Outdoor	
Effective Pixels  Day / Night  Yes  Low Light Sensitivity  Minimum Illumination  Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter  Yes  IR LED  Adaptive IR LED  IR Working Distance  Electronic Shutter  2688(H) X 1520(V) (4.09 MP)  Yes  Low Light Sensitivity  Superior  Color: 0.01 lux; B/W: 0 lux (IR LED on)  Yes  IR LED on)  40m  Electronic Shutter  1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Image Sensor	Progressive Scan CMOS	
Day / Night Yes  Low Light Sensitivity Superior  Minimum Illumination Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter Yes  IR LED Adaptive IR LED IR Working Distance 40m  Electronic Shutter 1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Sensor Size	1/3 "	
Low Light Sensitivity  Superior  Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter  Yes  IR LED  Adaptive IR LED  IR Working Distance  40m  Electronic Shutter  1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Effective Pixels	2688(H) X 1520(V) (4.09 MP)	
Minimum Illumination Color: 0.01 lux; B/W: 0 lux (IR LED on)  Mechanical IR Cut Filter Yes  IR LED Adaptive IR LED  IR Working Distance 40m  Electronic Shutter 1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Day / Night	Yes	
Mechanical IR Cut Filter  Yes  IR LED  Adaptive IR LED  IR Working Distance  40m  Electronic Shutter  1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Low Light Sensitivity	Superior	
IR LED Adaptive IR LED 40m Electronic Shutter 1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Minimum Illumination	Color: 0.01 lux; B/W: 0 lux (IR LED on)	
IR Working Distance 40m  Electronic Shutter 1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	Mechanical IR Cut Filter	Yes	
Electronic Shutter 1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	IR LED	Adaptive IR LED	
	IR Working Distance	40m	
S/N Ratio 52 dB	Electronic Shutter	1-1/100000 second (manual mode); 1-1/100000 second (auto mode)	
	S/N Ratio	52 dB	

#### Lens

Focal Length	Zoom, f2.8-12mm	
Aperture	F1.6	
Zoom Ratio	4.3x optical zoom	
Zoom Application	Camera Installation	
Iris	Fixed iris	
Focus	Auto focus	
Lens Mount	Board mount	
Horizontal Viewing Angle	91° - 27°	
Vertical Viewing Angle	54.4° - 13.7°	
Viewing Angle Adjustment	Pan: 0°-360°, Tilt: 0°-80°, Rotation: 0°-360°	

#### Video

Compression	H.265, H.264 (Baseline/ Main profile), MJPEG	
Maximum Frame Rate vs. Resolution	20 fps at 2592 x 1520 20 fps at 2048 x 1520 20 fps at 1920 x 1080 20 fps at 1280 x 720 20 fps at 640 x 360 20 fps at 704 x 576 20 fps at 704 x 288 20 fps at 352 x 288	
Multi-Streaming	Simultaneous triple streams	
Bit Rate Mode	Constant, Variable	
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, Intrusion Detection (Forbidden Area Detection)*	
Server-based Analytics	Object Line Counting, People Counting, Face Detection, Object Based Motion Detection, Tamper, Object Line Crossing Detection, Object Enter Area Detection, Missing Object Detection, Unattended Object Detection, Smoke Detection, Heat Map, Dwell Time, Direction Detection, Automatic License Plate Recognition, People Queue Detection (Require PC-based or standalone IVS or ALPR Server. Contact ACTi support for recommendations on how to maximize analytical accuracy)	
Image Orientation	Flip, Mirror	

#### **Network**

Network Protocol & Service	IPv4, TCP, UDP, DHCP, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, UPnP, QoS, SSL/TLS	
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), Intelligent event detection.
Event Response	E-mail notification with snapshots, Upload snapshot to FTP server, Save video or snapshot to local storage

#### Integration

ONVIF Compliant	Yes, Profile S, Profile G, Profile T
Web Browser	IE 11

#### Interface

Local Storage	MicroSD, MicroSDHC, MicroSDXC Memory Card Slot (card not included, up to 256GB, Kingston or Sandisk only)
Operating Button	Reset Button

#### General

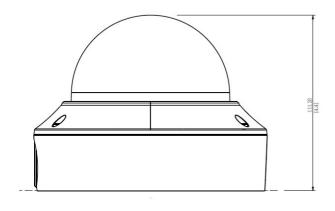
Power Source	DC 12V, PoE Class 3 (IEEE802.3af)	
Power Consumption	6 W (PoE)	
Weight	909g (2.004lb)	
Dimensions	(Ø x H): 148mm x 111.3mm (5.8" x 4.4")	
Environmental Casing	Weatherproof (IP68), Vandal proof (IK10)	
Corrosion Protection	Optional for project request. Chassis corrosion resistance at the seashore approximately 2-3 years.	
Operating Temperature	$-40^{\circ}\text{C} \sim 60^{\circ}\text{C} (-40^{\circ}\text{F} \sim 140^{\circ}\text{F})$	
Operating Humidity	10% - 95% RH	
Approvals	CE Class B, FCC Class B, BIS, EAC, IP68, IK10, UL Listed	
Warranty	2 Year(s). For extended warranty offering, see http://www.acti.com/support/warranty	

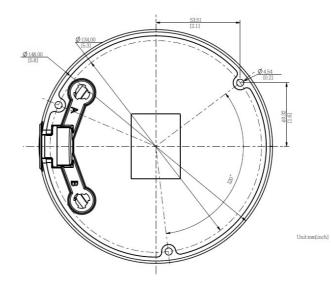
<sup>\*</sup> Intrusion detection is integrated with ZNR series.

# **▶** Photo Indication



# Dimension Diagram





Unit: mm [inch]

## Related Products

**Mounting Accessories - Camera Mount** 

Woulding Accessori	co - Calliel	a mount
PMAX-0102	Î	Straight Tube
PMAX-0103	1	Straight Tube with Bracket
PMAX-0104	1	Extension Tube
PMAX-0127		Mount Kit (for Z83, Z84, Z810, A811, A818)
PMAX-0302	$\bigcap_{\Pi}$	Gooseneck with Bracket
PMAX-0303	$\bigcap_{l}$	Gooseneck
PMAX-0321		Heavy Duty Wall Mount for Outdoor Domes (for A8x, Z83, Z84, except A88)
PMAX-0352		Wall Mount with Built-in Junction Box (for Z83, Z84, Z810)
PMAX-0402		Corner Mount
PMAX-0503		Pole Mount (for PMAX-0102, PMAX-0312, PMAX-0313, PMAX-0314, PMAX-0702, PMAX-1106, PMAX-1107), supports 5.25" to 8.5" Poles
PMAX-0505		Pole Mount (for B4x, B41x, E44, E45, E46, E48, E44A, E45A, E46A, E41x, I4x, PMAX-0312, PMAX-0313, PMAX-0314, PMAX-0330), supports 2" to 3" Poles
PMAX-0527		Pole Mount (for Z4x, Z710, Z8x, Z9x, A7x), supports 2.64" to 5" Poles
PMAX-0702		Junction Box for PTZ and Dome Cameras
PMAX-0723		Junction Box (for Z83, Z84)
PMAX-0808		Converter Ring, 1.5" NPT for Third-Party Mounting Accessories
PMAX-1031	(F)	Flush Mount (for Z83, Z84)
PMAX-1501		Cable Gland for Outdoor Domes (except Hemispheric Domes)

**Note**: Some mounting accessories may need additional accessories for installation. Please check <u>www.acti.com/mountingselector</u> 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)