Z412

2MP 4.3x Zoom Bullet with IR LED 60m, WDR 120dB



- 2 Megapixel, 4.3x, Zoom Bullet
- IR LED 60m, Superior WDR (120 dB)
- Color Min. Illumination 0.003 lux
- DORI (43.4-186.2 / 17.4-74.5 / 8.7-37.2 / 4.3-18.6m)
- Weatherproof (IP68), Vandal proof (IK10), UL Listed

Specifications

Product Profile

Product Type	Zoom Bullet
Application Environment	Outdoor
Maximum Resolution	2MP
Image Sensor	Progressive Scan CMOS
Sensor Size	1/2.7 "
Day / Night	Yes
Low Light Sensitivity	Superior
Minimum Illumination	Color: 0.003 lux at F1.6 (AGC on); B/W: 0 lux (IR LED on)
Mechanical IR Cut Filter	Yes
IR LED	Adaptive IR LED x 3 (850 nm)
IR Working Distance	60m
Electronic Shutter	1-1/100000 second (manual mode); 1-1/100000 second (auto mode)
S/N Ratio	75 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	103.6° - 33.4°
Vertical Viewing Angle	54.8° - 18.7°
Viewing Angle Adjustment	Pan: 0°-360°, Tilt: 0°-90°, Rotation: 0°-360°

Video

Compression	H.265 Adaptive Stream (equivalent to Zip or Smart Stream or 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 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), Highlight compensation (HLC), Brightness, Contrast, Sharpness, Saturation, Exposure (Auto/Manual), Defogging
Privacy Mask	4 configurable regions
Text Overlay	Yes
Built-in Analytics	People Detection, Vehicle Detection, Tampering Detection, Object Based Motion Detection, Object Line Crossing Detection, Intrusion Detection (Forbidden Area Detection)

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

Detection Range

Observation Range	Detection: 43.4m-186.2m Observation: 17.4m-74.5m Recognition: 8.7m-37.2m Identification: 4.3m-18.6m

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

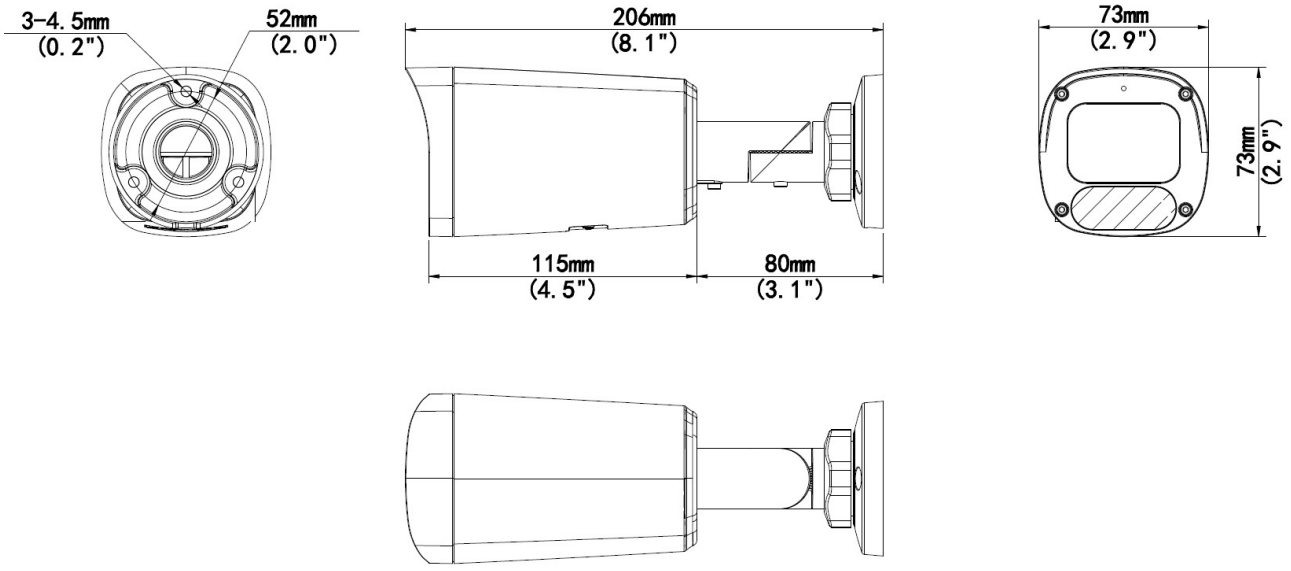
Operating Button	Reset Button

General

Power Source	DC 12V, PoE (IEEE802.3af)
Power Consumption	7 W (PoE)
Dimensions	(W x H x D): 73mm x 73mm x 206mm (2.9" x 2.9" x 8.1")
Environmental Casing	Weatherproof (IP68), Vandal proof metal casing (IK10)
Corrosion Protection	Optional for project request. Chassis corrosion resistance at the seashore approximately 3 years.
Mount Type	Pole Mount
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, BSMI
Color	White
Real-time Clock (RTC)	No
Warranty	2 Year(s). For extended warranty offering, see http://www.acti.com/support/warranty

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

Dimension Diagram



Unit: mm [inch]

Related Products

Mounting Accessories - Camera Mount

PMAX-0527		Pole Mount (for Z3x, Z4x, Z5x, Z724, Z8x, Z9x, Z972, A7x, Q550), supports 2.64" to 5" Poles
PMAX-0538		Pole Mount (for Z3x, Z4x, Z5x, Z724, Z8x, Z9x, Z972, A7x, Q550, K3x, K5x, K7x) , supports 2.64" to 5" Poles
PMAX-0729		Junction Box (for Z39, Z310, Z48, Z49)

Note: Some mounting accessories may need additional accessories for installation. Please check 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)

Illuminators - IR LED Illuminator

PLED-0210	

2026/3/8

- For product and mounting accessory information, visit: www.acti.com/products and www.acti.com/mountingselector
- All specifications are subject to change without notice.