

# B412

## 3MP Zoom Bullet with D/N, Adaptive IR, Extreme WDR, SLLS, 10x Zoom Lens



- 3 Megapixel
- Day & Night with Superior Low Light Sensitivity and Adaptive IR LED
- 10x Zoom Lens with f4.7-47mm/F1.6-F3.0, DC iris, Auto focus
- Extreme WDR
- H.265 Compression
- Event trigger, response and notification

## ► Specifications

### Device

|                                  |   |
|----------------------------------|---|
| Product Type                     | Zoom Bullet   |
| Maximum Resolution               | 3MP   |
| Application Environment          | Outdoor   |
| Image Sensor                     | Progressive Scan CMOS   |
| Sensor Size                      | 1/2.8 "   |
| Effective Pixels                 | 2065(H) X 1553(V) (3.21 MP)   |
| Day / Night                      | Yes   |
| Low Light Sensitivity            | Superior  |
| Minimum Illumination             | Color: 0.1 lux at F1.6 (30 IRE, 2400 K); B/W: 0 lux at F1.6 (IR LED on) |
| Color to B/W Switch              | ISP based switch, configurable  |
| Mechanical IR Cut Filter         | Yes   |
| IR Sensitivity Range             | 700-1100nm  |
| IR LED                           | Adaptive IR LED x 10 (850 nm)   |
| IR Working Distance              | 60m   |
| Electronic Shutter               | 1/5-1/64000 second (manual mode); 1/5-1/64000 second (auto mode)        |
| Horizontal Resolution (TV Lines) | 1450 TVL  |

|           |       |
|-----------|-------|
| S/N Ratio | 56 dB |
|-----------|-------|

## Lens

|                          |   |
|--------------------------|---|
| Focal Length             | Zoom, f4.7-47mm   |
| Aperture                 | F1.6-F3.0   |
| Zoom Ratio               | 10x optical   |
| Zoom Application         | Camera Installation, Auto Zoom by Event, Manual Operation |
| Iris                     | DC iris   |
| Focus                    | Auto focus  |
| Lens Mount               | Board mount   |
| Horizontal Viewing Angle | 58° - 5.8°  |
| Vertical Viewing Angle   | 45.3° - 5°  |

## PTZ

|                            |   |
|----------------------------|---|
| Absolute Position          | Yes                                       |
| Pan, Tilt or Zoom protocol | Visca, Pelco-D, Pelco-P, ACTi URL command |

## Video

|                                   |   |
|-----------------------------------|---|
| Compression                       | H.265, H.264 (Baseline/ Main/ High profile), MJPEG  |
| Maximum Frame Rate vs. Resolution | 30 fps at 2048 x 1536 60 fps at 1920 x 1080 30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 800 x 600 30 fps at 640 x 480 30 fps at 320 x 240   |
| Multi-Streaming                   | Simultaneous triple streams based on three configurations   |
| Bit Rate                          | 128Kbps - 12Mbps (per stream)   |
| Bit Rate Mode                     | Constant, Variable  |
| Wide Dynamic Range                | Extreme WDR (145 dB)  |
| Image Enhancement                 | White Balance, Brightness, Contrast, Saturation, Sharpness, Automatic gain control, Flickerless, Digital Image Stabilizer (DIS, EIS)*, Defogging  |
| Digital Noise Reduction           | 2D + 3D DNR   |
| Privacy Mask                      | 32 configurable regions (To be available through future firmware upgrade)   |
| Text Overlay                      | Yes   |
| Built-in Analytics                | Object Based Motion Detection, Tampering Detection*, Shock 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, Rotation*   |

## Audio

|                   |   |
|-------------------|---|
| Audio Type        | 2-way, Built-in Microphone, Mic-in, Line-in, Line-out |
| Audio Compression | 8 kHz, 16 bit encoding, Mono, PCM, G.711              |

## Network

|                            |   |
|----------------------------|---|
| Network Protocol & Service | IPv4/v6, TCP, UDP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SMTP, FTP, IGMP, ICMP, ARP, Bonjour, UPnP, QoS, SNMP, IEEE 802.1X |
|----------------------------|---|

|               |  |
|---------------|--|
| Ethernet Port | 1 x RJ-45 pigtail connector  |
| Security      | IP address filtering, HTTPS encryption, Password protected user level, Anonymous login, IEEE 802.1X network access control |

## Event

|                |  |
|----------------|--|
| Event Trigger  | Video motion detection (10 included and excluded polygons regions), External device through digital input, Sound detection   |
| Event Response | Notify control center, Go to Zoom preset point or preset tour, Change camera settings, Command other devices, E-mail notification with snapshots, Push notification to mobile device, Save video to local storage, Upload video or snapshot to FTP server, Upload video or snapshot to FTP server, Activate external device through digital output |

## Integration

|                       |   |
|-----------------------|---|
| Unified Solution      | Fully compatible with ACTi software             |
| GPS Position          | Manual setting                                  |
| ONVIF Compliant       | Yes, Profile S, Profile G, Profile T, Profile Q |
| GB28181 Compliant     | Yes   |
| Web Browser           | IE 11   |
| Auto Firmware Upgrade | Yes   |

## Interface

|                      |  |
|----------------------|--|
| Audio Interface      | Built-in microphone, 1/1, Cable with 3.5mm Phone Jack                  |
| Local Storage        | MicroSDHC, MicroSDXC Memory Card Slot (card not included, up to 256GB) |
| Digital Input/Output | 1/1 (Cable with Terminal block)  |

## General

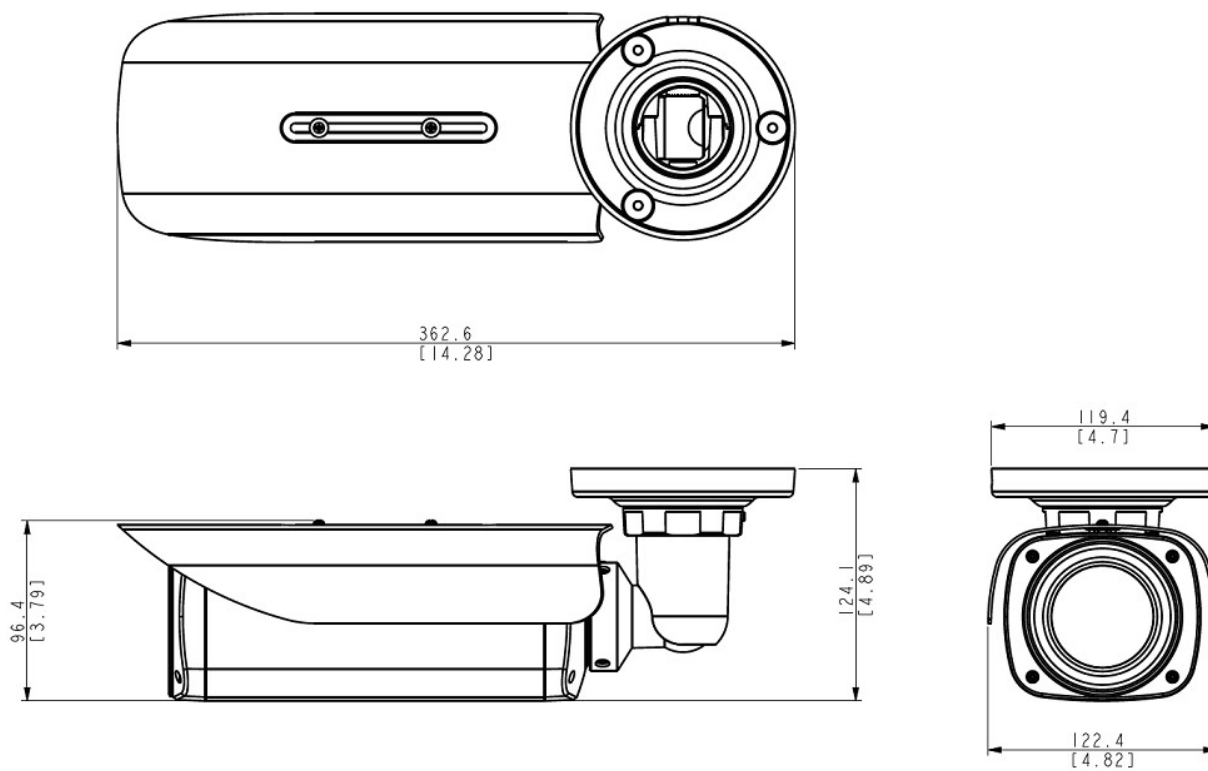
|                       |  |
|-----------------------|--|
| Power Source          | DC 12V, High PoE   |
| Power Consumption     | 18.8 W (PoE, heater and IR on), 15.6 W (DC, heater and IR on)  |
| Weight                | 2098g (4.625lb)  |
| Dimensions            | (W x H x D): 105.11mm x 124.06mm x 368.5mm (4.14" x 4.88" x 14.51")  |
| Environmental Casing  | Weatherproof (IP67), Vandal proof metal casing (IK10), Built-in dehumidifier   |
| Bundled Accessories   | Integrated bracket   |
| Mount Type            | Wall Mount, Ceiling Bracket, Pole Mount, Gang Box  |
| Heater                | Yes  |
| Dehumidifier          | Yes  |
| Starting Temperature  | -40°C ~ 60°C (-40°F ~ 140°F) within 30 minutes   |
| Operating Temperature | -40°C ~ 60°C (-40°F ~ 140°F)   |
| Operating Humidity    | 10% - 85% RH   |
| Approvals             | CE Class B, FCC Class B, IP67, NEMA 4X, IK10 (metal casing), UL (for optional PoE injector and power adapter)                          |
| Warranty              | 3 Year(s). For extended warranty offering, see <a href="http://www.acti.com/support/warranty">http://www.acti.com/support/warranty</a> |

\* To be available through future firmware upgrade

## ► Photo Indication











## ► Dimension Diagram



Unit: mm [inch]



## ► Related Products

### Mounting Accessories - Camera Mount


|            |  |  |
|------------|--|--|
| PMAX-0504  |   | Pole Mount (for B4x, B41x, E44, E45, E46, E48, E44A, E45A, E46A, E41x, I4x, PMA-0330), supports 3.25" to 7.0" Poles                          |
| PMAX-0505  |   | Pole Mount (for B4x, B41x, E44, E45, E46, E48, E44A, E45A, E46A, E41x, I4x, PMA-0312, PMA-0313, PMA-0314, PMA-0330), supports 2" to 3" Poles |
| PMAX-0508  |   | Pole Mount (for PMA-0203, PMA-0204, PMA-0205, PMA-0206, PMA-0704), supports 3" to 9" Poles   |
| PMAX-0512  |   | Pole Mount (for E39, PMA-0706), supports 3.25" to 7.0" Poles   |
| PMAX-0704  |   | Junction Box (for A4x, B4x, B41x, E44, E45, E46, E48, E44A, E45A, E46A, E41x, I4x, PMA-0203~PMA-0205)  |
| PMAX-0706  |   | Junction Box (for A3x, A4x, E39, E41x, PMA-0805)   |
| PMAX-0806  |   | Gang Box Converter (for B4x, E39, E44, E45, E46, E44A, E45A, E46A), supports 4" Round and 4" Octagon Boxes                                   |
| R706-00006 |  | Back Bracket with Pre-installed (For B41x, B43, I42, I48, E413, E415, E417)  |

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

### Audio Devices - Microphone

|           |   |   |
|-----------|---|---|
| PMIC-0100 |  | Active Microphone Omnidirectional for all Cameras with Line-in Audio                        |
| PMIC-0200 |  | Passive Microphone Omnidirectional for all Cameras with Mic-in Audio using 3.5mm Phone Jack |

### Other Accessories - Camera Part

|            |   |                          |
|------------|---|--------------------------|
| R716-00001 |  | Sunshield (for B4x, I4x) |
|------------|---|--------------------------|