

# A29

## 2MP Face, People and Car Detection Box with D/N, Extreme WDR, ELLS, Fixed Lens



- Face, People and Car Detection
- 2 Megapixel (Support 120fps@1080P)
- Fixed Lens with f2.8mm/F2.0
- Extreme WDR
- Super wide angle
- Event trigger, response and notification

### ► Specifications

#### Device

|                                  |                                                                  |
|----------------------------------|------------------------------------------------------------------|
| Product Type                     | Box                                                              |
| Maximum Resolution               | 2MP                                                              |
| Product Application              | Face, People and Car Detection                                   |
| Application Environment          | Indoor/Outdoor                                                   |
| Image Sensor                     | Progressive Scan CMOS                                            |
| Sensor Size                      | 1/2.8 "                                                          |
| Effective Pixels                 | 1945(H) X 1097(V) (2.13 MP)                                      |
| Day / Night                      | Yes                                                              |
| Low Light Sensitivity            | Extreme                                                          |
| Minimum Illumination             | Color: 0.007 lux (30 IRE); B/W: 0.001 lux                        |
| Mechanical IR Cut Filter         | Yes                                                              |
| Electronic Shutter               | 1/5-1/64000 second (manual mode); 1/5-1/64000 second (auto mode) |
| Horizontal Resolution (TV Lines) | 1000 TVL                                                         |
| S/N Ratio                        | 75 dB                                                            |

## Lens

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| Focal Length             | Fixed focal, f2.8mm                                    |
| Aperture                 | F2.0                                                   |
| Iris                     | Fixed iris                                             |
| Focus                    | Auto back focus                                        |
| Lens Mount               | CS Mount (interchangeable lens for DC-Iris and P-Iris) |
| Horizontal Viewing Angle | 108.6°                                                 |
| Vertical Viewing Angle   | 63.6°                                                  |

## Video

|                                      |                                                                                                                                                                                                                                                                                             |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compression                          | H.265, H.264 (Main profile), MJPEG                                                                                                                                                                                                                                                          |
| Maximum Frame Rate vs. Resolution    | 120 fps at 1920 x 1080 (High Frame Mode) 60 fps at 1920 x 1080 (High Frame Mode) 30 fps at 1920 x 1080 30 fps at 1280 x 960 120 fps at 1280 x 720 (High Frame Mode) 60 fps at 1280 x 720 (High Frame Mode) 30 fps at 1280 x 720 30 fps at 800 x 600 30 fps at 720 x 480 30 fps at 640 x 480 |
| High Frame Mode                      | Support                                                                                                                                                                                                                                                                                     |
| Multi-Streaming                      | Simultaneous triple streams based on configurations of video resolution, compression format, and frame rate                                                                                                                                                                                 |
| Bit Rate Mode                        | Constant, Variable                                                                                                                                                                                                                                                                          |
| Wide Dynamic Range                   | Extreme WDR (142 dB)                                                                                                                                                                                                                                                                        |
| Image Enhancement                    | White Balance, Brightness, Contrast, Saturation, Sharpness, Backlight compensation (BLC), Strong Light Suppression                                                                                                                                                                          |
| Digital Noise Reduction              | 2D + 3D DNR                                                                                                                                                                                                                                                                                 |
| Privacy Mask                         | 4 configurable regions                                                                                                                                                                                                                                                                      |
| Text Overlay                         | Yes                                                                                                                                                                                                                                                                                         |
| On-Screen Graphics (Picture Overlay) | Yes                                                                                                                                                                                                                                                                                         |
| Built-in Analytics                   | Deep Learning : Face Detection, People Detection, Vehicle Detection, Tampering Detection, People Line Crossing Detection, People Enter Area Detection, People Exit Area Detection, People Loitering Detection                                                                               |
| Image Orientation                    | Flip, Mirror, Rotation (Corridor mode) (90°, 180°, 270°)                                                                                                                                                                                                                                    |

## Audio

|                   |                                  |
|-------------------|----------------------------------|
| Audio Type        | 2-way, Mic-in, Line-in, Line-out |
| Audio Compression | 8 kHz, Mono, G.711 u-law         |

## 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 Ethernet (10/100 Base-T), RJ-45 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 (3 regions), External device through digital input, Sound detection, Intelligent event detection, Video streams loss                                                                                                                                                                         |
| Event Response | Notify control center, Change camera settings, Command other devices, E-mail notification with snapshots, Play the audio file, Push notification to mobile device, Save video to local storage, Upload video to NVR server, Upload video or snapshot to FTP server, Activate external device through digital output |

## System

|                |                                                          |
|----------------|----------------------------------------------------------|
| System Monitor | CPU loading, memory usage and network statistics via API |
| Watchdog       | Support                                                  |

## Integration

|                       |                                                                            |
|-----------------------|----------------------------------------------------------------------------|
| Unified Solution      | Fully compatible with ACTi software                                        |
| GPS Position          | Manual setting                                                             |
| Edge Recording        | Support (integration with NVR by ONVIF Profile G or proprietary protocol)* |
| ONVIF Compliant       | Yes, Profile S, Profile G, Profile Q, Profile T, Profile M                 |
| Web Browser           | IE 11, Google Chrome, Microsoft Edge, Apple Safari                         |
| Auto Firmware Upgrade | Yes                                                                        |

## Interface

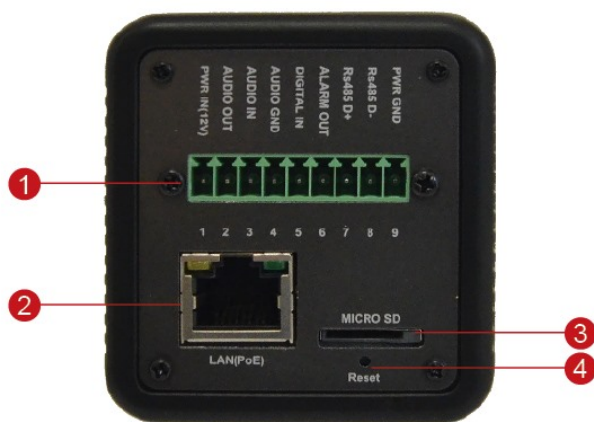
|                      |                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------|
| Serial Port          | 1 x RS-485                                                                                                |
| Audio Interface      | 1/1, Terminal block                                                                                       |
| Local Storage        | MicroSD, MicroSDHC, MicroSDXC Memory Card Slot (card not included, up to 256GB, Kingston or Sandisk only) |
| Digital Input/Output | 1/1 (Terminal block)                                                                                      |
| Operating Button     | Reset Button                                                                                              |

## General

|                       |                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Power Source          | DC 12V, PoE Class 3 (IEEE802.3af)                                                                                                      |
| Power Consumption     | 4.92 W (DC), 5.76 W (PoE)                                                                                                              |
| Weight                | 370g (0.82lb)                                                                                                                          |
| Environmental Casing  | Optional housing (IP66-IP68)                                                                                                           |
| Operating Temperature | -10°C ~ 50°C (14°F ~ 122°F)                                                                                                            |
| Approvals             | CE Class B, FCC Class B                                                                                                                |
| Color                 | White                                                                                                                                  |
| Real-time Clock (RTC) | Yes                                                                                                                                    |
| Warranty              | 3 Year(s). For extended warranty offering, see <a href="http://www.acti.com/support/warranty">http://www.acti.com/support/warranty</a> |

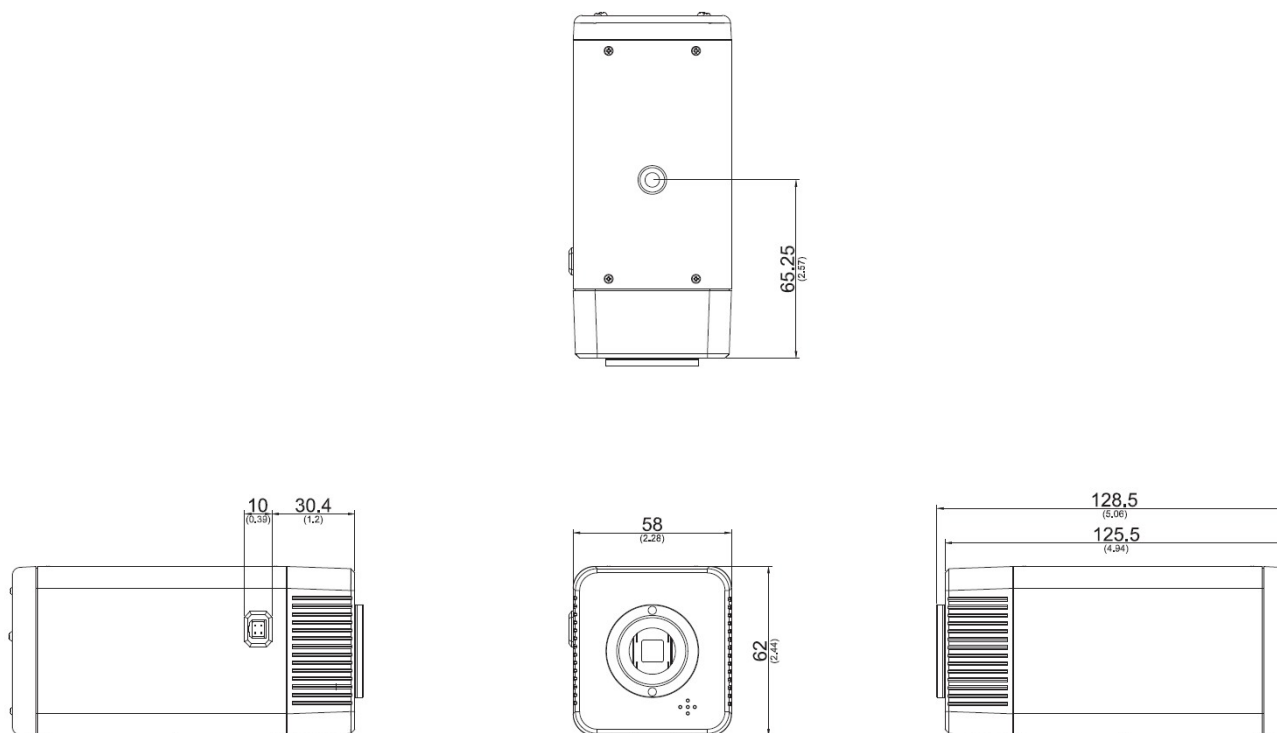
\* Edge Recording function is integrated with NVR 3 Corporate / NVR 3 Business / INR / GNR series.

## ► Photo Indication



- 1 Input and Output Connector
  - DC 12V Power Input
  - Audio Input / Output
  - Digital Input / Output
  - Serial Port
- 2 Ethernet Port
- 3 Memory Card Slot
- 4 Reset Button

## ► Dimension Diagram



Unit: mm [inch]

## ► Related Products

### Mounting Accessories - Camera Mount

|           |                                                                                   |                                                                                                                            |
|-----------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| 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-1105 |  | Bracket for Indoor Box Cameras (for B2x)                                                                                   |
| PMAX-1106 |  | Bracket for Outdoor Box Cameras (KCM-5211E, KCM-5511, KCM-5611, Box Cameras with Outdoor Housing)                          |

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

### Enclosures - Box Camera Housing

|           |                                                                                     |                                                                                 |
|-----------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| PMAX-0200 |    | Outdoor Housing with Heater and Fan (110V)                                      |
| PMAX-0201 |    | Outdoor Housing with Heater and Fan (220V)                                      |
| PMAX-0202 |   | Outdoor Housing                                                                 |
| PMAX-0208 |  | Explosion Proof Housing with Heater, Fan (AC 110V~220V) and Bracket             |
| PMAX-0210 |  | Stainless Steel Housing with Heater, Fan (AC 110V~220V) and Bracket             |
| PMAX-0221 |  | POE Explosion-proof Stainless Steel SUS316 PTZ Housing, with Heater, Fan and IR |
| PMAX-0222 |  | POE Explosion-proof Stainless Steel SUS316 PTZ Housing, with Fan and Heater     |
| PMAX-0228 |  | PoE Explosion Proof Housing with Heater, Fan and Bracket                        |

### Lenses - Vari-focal Lens

|           |                                                                                     |                                                               |
|-----------|-------------------------------------------------------------------------------------|---------------------------------------------------------------|
| PLEN-2205 |  | Vari-focal IR-corrected f2.8-12mm, F1.4, P-Iris CS mount lens |
| PLEN-2213 |  |                                                               |

### Power Supply Accessories - Power Adapter

|           |                                                                                     |                                                                                    |
|-----------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| PPBX-0011 |  | Power Adapter AC 100~240V, with universal connectors for all DC12V powered devices |
|-----------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|

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) |
|-----------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

Network & Storage Peripherals - Data Switch

|           |                                                                                   |                                                                                    |
|-----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| PPSW-0102 |  | PLANET FGSD-1011HP 8-Port 802.3at PoE Switch (PoE Budget 120W)                     |
| PPSW-0105 |  | PLANET GS-4210-8P2C 8-Port Gigabit 802.3at Managed PoE Switch (PoE Budget 120W)    |
| PPSW-1101 |  | PLANET GS-4210-24PL4C 24-Port Gigabit 802.3at Managed PoE Switch (PoE Budget 440W) |
| PPSW-3100 |  | PLANET FGSW-1816HPS 16-Port 802.3at PoE Switch (PoE Budget 220W)                   |

Audio Devices - Microphone

|           |                                                                                   |                                                                                                                       |
|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| PMIC-0100 |  | Active Microphone Omnidirectional for all Cameras with Line-in Audio                                                  |
| PMIC-0201 |  | Passive Microphone Omnidirectional for all Cameras with Mic-In Audio using Cable Wire or Terminal Connector, 2m cable |

Illuminators - IR LED Illuminator

|           |                                                                                     |                                                                              |
|-----------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| PLED-0200 |   | SPINLUX (SL-A2IRXX10-24CL) IR Illuminator 10° Angle with 120 m approx. range |
| PLED-0201 |  | SPINLUX (SL-A2IRXX25-24CL) IR Illuminator 25° Angle with 50 m approx. range  |