A422

4MP Deep Learning AI 5x Zoom Bullet with IR LED 85m, WDR 150dB



- 4 Megapixel, 5x, Zoom Bullet
- Deep Learning AI
- IR LED 85m, Extreme WDR (150 dB)
- Color Min. Illumination 0.001 lux
- Smart Motion Detection
- DORI (64-200 / 25.4-79.4 / 12.8-40 / 6.4-20m)
- Weatherproof (IP68), Vandal proof (IK10), UL Listed
- Taiwan IoT Cybersecurity Certification

Specifications

Product Profile

Product Type	Zoom Bullet
Application Environment	Outdoor
Maximum Resolution	4MP
Image Sensor	Progressive Scan CMOS
Sensor Size	1/2.7 "
Effective Pixels	2688(H) X 1520(V) (4 MP)
Day / Night	Yes
Low Light Sensitivity	Extreme
Minimum Illumination	Color: 0.001 lux at F1.6 (AGC on); B/W: 0 lux (IR LED on)
Mechanical IR Cut Filter	Yes
IR LED	IR LED x 3 (850 nm)
IR Working Distance	85m
Electronic Shutter	1/5-1/100000 second (auto mode)
S/N Ratio	75 dB

Lens

Focal Length	Zoom, f2.7-13.5mm

Aperture	F1.6-F3.3
Zoom Ratio	5x optical zoom
Iris	Adaptive iris
Focus	Auto focus
Lens Mount	Board mount (Φ14)
Horizontal Viewing Angle	102.8° - 32.4°
Vertical Viewing Angle	54.9° - 18.9°
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.265, H.264 Adaptive Stream (equivalent to Zip or Smart Stream or H.264+), H.264, MJPEG
Maximum Frame Rate vs. Resolution	30 fps at 2688 x 1520 30 fps at 2560 x 1440 30 fps at 1920 x 1080 30 fps at 1280 x 960 30 fps at 1280 x 720 30 fps at 640 x 480 30 fps at 352 x 240
Bit Rate Mode	Constant, Variable
Multi-Streaming	Simultaneous quad streams
Digital Noise Reduction	2D + 3D DNR
Wide Dynamic Range	Extreme WDR (150 dB)
Image Orientation	Flip, Mirror, Rotation (Corridor mode) (90º, 180º, 270º)
Image Enhancement	White Balance, Brightness, Contrast, Sharpness, Saturation, Backlight compensation (BLC), Strong Light Suppression, Automatic exposure, Automatic gain control (AGC)
Privacy Mask	4 configurable regions
Text Overlay	Yes
On-Screen Graphics (Picture Overlay)	Yes
Built-in Analytics	Face Detection, Smart Motion Detection (People Detection, Vehicle Detection), People Line Crossing Detection, People Enter Area Detection, People Loitering Detection (up to 10s), Vehicle Line Crossing Detection, Vehicle Enter Area Detection, Vehicle Loitering Detection (up to 10s), Tampering Detection

Analytics

Deep Learning AI	1.0

Audio

Audio Type	2-way, Line-in, Line-out
Audio Compression	PCM, G.711, G.726

Network

Network Protocol & Service	IPv4, IPv6, TCP, UDP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, NTP, RTP, RTSP, RTCP, SRTP, LLDP, SMTP, FTP, SFTP, IGMP, ICMP, ARP, UPnP, Bonjour, QoS, TLS 1.2, TLS 1.3, SNMP, IEEE 802.1X, SMB/CIFS (SAMBA)
Ethernet Port	1 x Ethernet (10/100 Base-T), RJ-45 pigtail connector
Security	IP address filtering, HTTPS encryption, TLS v1.2, TLS v1.3 encrypted communication, SRTP encrypted video streaming, Password protected user level, Anonymous login, IEEE 802.1X network access control, Standard IoT Security (anti-hacking, anti-malware)

Detection Range

Observation Range	Detection: 64m-200m Observation: 25.4m-79.4m Recognition: 12.8m-40m Identification: 6.4m-20m

Event

Event Trigger	Video motion detection (4 polygonal regions with up to 10 vertices), External device through digital input, Intelligent event detection, Sound detection, Video streams loss, System log buffer overrun, Remove system log, Logon events (Login Failure, Login Success, Block an Account), SD Card Write Failure
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 storage, Save video to NAS storage via NFS or SMB/CIFS (SAMBA), 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
System Log	Support
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	Profile S, Profile G, Profile T, Profile M
Web Browser	IE 11, Google Chrome, Microsoft Edge, Apple Safari, Firefox
Auto Firmware Upgrade	Yes

Interface

Audio Interface	Cable with Terminal block
Digital Input/Output	1/1 (Cable with Terminal block)
Operating Button	Reset Button

Installation

Installation Tool	Built-in Pixel Counter

General

Power Source	DC 12V, PoE Class 3 (IEEE802.3af)
Power Consumption	15 W (PoE)
Weight	1410g (3.11lb)
Dimensions	(L x W x H): 297.1mm x 96.2mm x 91.5mm (11.7" x 3.8" x 3.6")
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	Surface, Pole Mount, Corner Mount
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)

Operating Humidity	≤95% RH, non-condensing
Approvals	CE Class B, FCC Class B, IP68, IK10 (metal casing), UL Listed, Taiwan IoT Cybersecurity Certification (TAICS Level 1, CNS-16120 Level 1)
Color	White
Real-time Clock (RTC)	Yes
Warranty	3 Year(s). For extended warranty offering, see http://www.acti.com/support/warranty

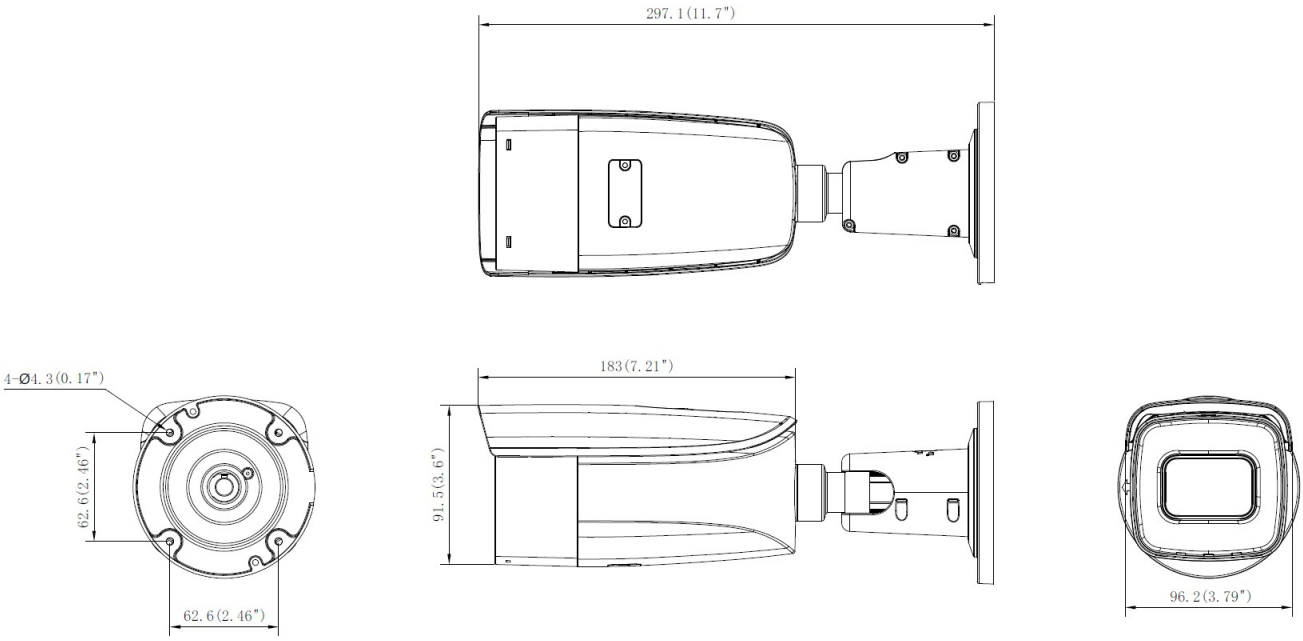
* cross-browser compatibility: Not available for H.265 video decoding *2 Edge Recording function is integrated with NVR 3 Corporate / NVR 3 Business / INR / GNR series.

Photo Indication



1. Ethernet Port
2. Digital Input / Output
3. Audio Input / Output
4. DC 12V Power Input
5. Reset Button
6. Memory Card Slot

Dimension Diagram



Unit: mm(inch)

Unit: mm [inch]

Related Products

Mounting Accessories - Camera Mount

PMAX-0407		Corner Mount (for A42x, A42xD, A570, A570-P1, A570-P2, A7xD, A82xD, VMGB-359, VMGB-359-P1)
PMAX-0524		Pole Mount (for A46, A421, A422, A423, A425, VMGB-359), supports 2.64" to 5" Poles
PMAX-0721		Junction Box (for A422, A423)

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-0023		Power Adapter 12V /2A(US) with DC PLUG for A416, A418

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-0108		8-Port Gigabit 802.3at Managed PoE Switch (PoE Budget 120W)
PPSW-0109		8-Port 802.3at Smart Managed PoE Switch (PoE Budget 120W)
PPSW-1101		PLANET GS-4210-24PL4C 24-Port Gigabit 802.3at Managed PoE Switch (PoE Budget 440W)
PPSW-1107		24-port 10/100/1000Mbps PoE, Smart Managed Gigabit Ethernet PoE Switch
PPSW-2105		4-Port 802.3at Smart Managed Gigabit PoE Switch
PPSW-3101		16-Port Gigabit 802.3at Managed PoE Switch (PoE Budget 240W)
PPSW-3103		16-Port 802.3at PoE Switch (PoE Budget 250W)

PPSW-3104		16-Port 802.3at Smart Managed PoE Switch (PoE Budget 250W)
PPSW-3402		16-Port 10/100/1000T 802.3bt PoE + 8-Port 10/100/1000T + 4-Port 10G SFP+ Managed Ethernet Switch
PPSW-4205		24-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Managed Switch (PoE Budget 300W)

Audio Devices - Microphone

PMIC-0100		Active Microphone Omnidirectional for all Cameras with Line-in Audio

Illuminators - IR LED Illuminator

PLED-0210		