A820

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



- 4 Megapixel, 5x, Zoom Dome
- 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 Dome
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°-355°, Tilt: 0°-75°, Rotation: 0°-355°

Video

Compression	H.265 Adaptive Stream, H.264 Adaptive Stream, 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, SNMP, IEEE 802.1X
Ethernet Port	1 x Ethernet (10/100 Base-T), RJ-45 pigtail connector
Security	IP address filtering, HTTPS encryption, TLS v1.2 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 alert sound, Push notification to mobile device, Save video to 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
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)(*2)
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	1/1, Terminal block
Digital Input/Output	1/1 (Terminal block)
Operating Button	Reset Button

Installation

Installation Tool	Built-in Pixel Counter

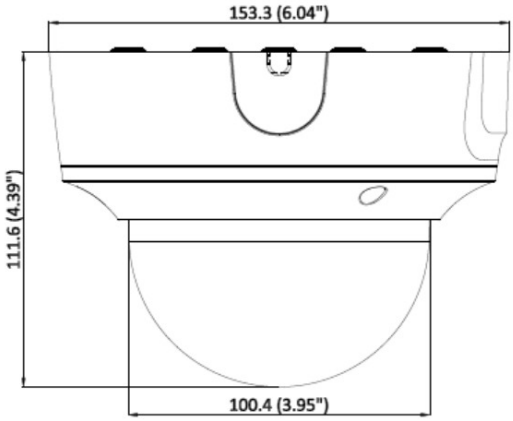
General

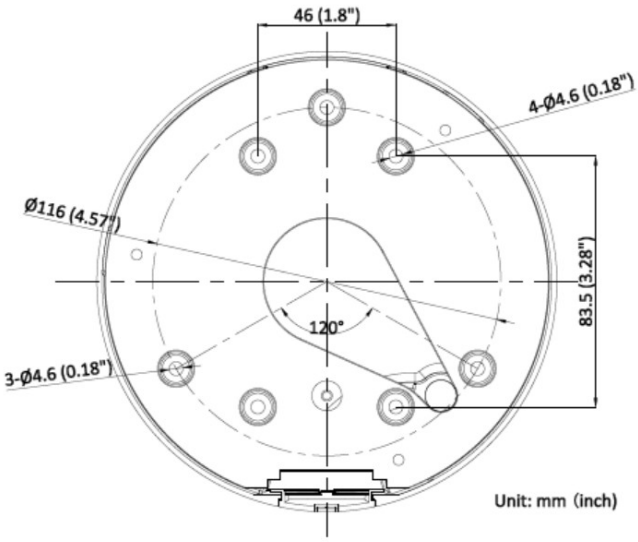
Power Source	DC 12V, PoE Class 3 (IEEE802.3af)
Power Consumption	12.5 W (PoE)
Dimensions	(Ø x H): 141mm x 99.5mm (5.55" x 3.9")
Environmental Casing	Weatherproof (IP68), Vandal proof (IK10)
Corrosion Protection	Optional for project request. Chassis corrosion resistance at the seashore approximately 3 years.
Mount Type	Wall Mount, Pole Mount, Pendant, Corner Mount
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
Approvals	CE Class B, FCC Class B, IP68, IK10, 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.

Dimension Diagram





Unit: mm [inch]

Related Products

Turret - Zoom Turret

Z81		2MP Outdoor Zoom Turret with D/N, Adaptive IR, Extreme WDR, SLLS, 4.4x Zoom lens, f2.7-12mm/F1.4 (HOV: 94°-28°), Auto Focus (for installation), H.265/H.264, 1080p/30fps, 2D+3D DNR, Built-in Microphone, PoE/DC12V, IP67
Z814		4MP Outdoor Zoom Turret with D/N, Adaptive IR, Superior WDR, SLLS, 4.3x Zoom lens, f2.8-12mm/F1.6 (HOV: 89.4° - 29.3°), Auto Focus (for installation), H.265/H.264, 2D+3D DNR, Built-in Microphone, PoE/DC12V, IP68, IK10
Z82		4MP Outdoor Zoom Turret with D/N, Adaptive IR, Extreme WDR, SLLS, 4.4x Zoom lens, f2.7-12mm/F1.4 (HOV: 91°-27°), Auto Focus (for installation), H.265/H.264, 1080p/30fps, 2D+3D DNR, Built-in Microphone, PoE/DC12V, IP67
Z87		4MP Outdoor Zoom Turret with D/N, Adaptive IR, Superior WDR, SLLS, 4.3x Zoom lens, f2.8-12mm/F1.6 (HOV:99.8°-30.7°), Auto Focus (for installation), H.265/H.264, 2D+3D DNR, Built-in Microphone, PoE/DC12V, IP67

Mounting Accessories - Camera Mount

PMAX-0102		Straight Tube

PMAX-0103		Straight Tube with Bracket
PMAX-0104		Extension Tube
PMAX-0127		Mount Kit (for Z83, Z84, Z810, A811, A818)
PMAX-0302		Gooseneck with Bracket
PMAX-0303		Gooseneck
PMAX-0357		Wall Mount (for A826)
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-0702		Junction Box for PTZ and Dome Cameras
PMAX-0722		Junction Box (for A811, A813, A818)
PMAX-0807		Gangbox Converter (for PMAX-0102, PMAX-0312, PMAX-0313, PMAX-0314, PMAX-0321), supports Two-Gang Boxes
PMAX-0808		Converter Ring, 1.5" NPT for Third-Party Mounting Accessories
PMAX-1030		Flush Mount (for A811, A813, A818)
PMAX-1501		Cable Gland for Outdoor Domes (except Hemispheric Domes)

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
PPBX-0034		Power Adapter AC 100~240V (US) for A3x, A4x, A7x, A88, A9x, Z3x, Z4x, Z7x, Z8x, Z9x, Q550

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)

Audio Devices - Microphone

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

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