

AI4 IR Dome

Rugged 4MP (16:9 aspect),
5MP (4:3 aspect) dome with built-in
video intelligence



The **AI4 IR Dome** from March Networks® delivers high image quality, combined with built-in IR illumination, allowing you to discern objects in the dark from over 50 meters (164 feet) away. The housing is weather-resistant and vandal-proof, rated for severe outdoor conditions and extreme temperatures.

Incorporating advanced system-on-chip (SoC) technology from Ambarella®, the camera features a set of powerful video analytics including tripwire, intrusion detection, loitering detection, and abandoned object detection, crowd detection, and face detection. Video analytics enable organizations to enhance security in both public and private spaces by detecting perimeter or area breaches, unattended objects, and atypical activity more rapidly and consistently. The software detects camera tampering in real time and also promotes more proactive system maintenance by alerting staff to camera obstructions or changes in camera positioning that may otherwise go unnoticed.

Key Benefits

▼ Built-In video Intelligence.

- **Abandoned Object** - an alarm is triggered if an object remains in one spot for too long.
- **Loitering Detection** - an alarm is triggered when people remain in an area for too long.
- **Tripwire** - an alarm is triggered when a person or object crosses the defined line.
- **Stopped Vehicle** - an alarm is triggered when a vehicle remains in an area for too long.
- **Intrusion Detection** - an alarm is triggered when people or vehicles enter a specific area.
- **Object Removal** - an alarm is triggered if an object is removed from an area.
- **Face detection** - an alarm is triggered when a face is fully visible
- **Crowd detection** - an alarm is triggered when a preconfigured number of people are detected in a predefined area

AI4 IR Dome

CAMERA

Image Sensor	1/2.7" Progressive CMOS
Effective Pixels	4MP, 2560 (H) x 1440 (V) 16:9 aspect 5MP, 2560 (H) x 1944 (V) 4:3 aspect
Lens	2.7 – 13mm, motorized, F1.6-F3.3, P-Iris
Field of View	113° H x 58.4° V (wide); 31.4° H x 17.6° V (tele)
High Dynamic Range (HDR)	120 dB
Day/Night	Automatic IR cut filter
Minimum Illumination	Color: 0.075 lux @f1.4; B/W: <0.01 lux @f1.4; IR On: 0 lux
Shutter Speed	1/5 sec - 1/32,000 sec
Camera Angle Adjustment	Pan 350
Pan/Tilt/Zoom	5X optical zoom, 48x digital zoom (4x on IE plug-in, 12x built-in)
White Balance	Manual/Automatic
IR Wavelength	850nm
IR Illumination Distance	50m (164 ft) with intelligent IR

VIDEO

Video Compression	H.265, H.264, MJPEG
Resolution	5MP (2560x1920), 2MP 1080p (1920x1080), 1MP 720p (1280x720)
Frame Rate	Up to 30fps @ 5MP, 2MP, 1MP
Streaming	3 video streams (Up to 9 configurable profiles) in H.265, H.264, MJPEG; Max frame rate: 30 fps @ 2560x1920 (WDR Pro on)
Image Settings	General settings: video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings; Illuminators: illuminators, anti-overexposure; Image settings: white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, EIS; Exposure: BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR; Focus: zoom, focus; Privacy mask; Scheduled profile settings

AUDIO

Audio Streaming	Full duplex
Audio Compression	G.711, G.726
Audio Input/Output	Line in/line out

NETWORK

Security	Access list, digest authentication, HTTPS, IEEE 802.1x, password protection, user access log, user account management
Supported Protocols	802.1X, ARP, Bonjour, CIFS/SMB, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv 4, IPv 6, NTCIP, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2, UDP, UPnP

SYSTEM INTEGRATION

Video intelligence	Intrusion detection, loitering detection, line crossing detection, unattended object detection, missing object detection, face detection, crowd detection
Alarm Trigger	Audio detection, camera tampering detection, analytics, 2X digital inputs
Alarm Events	Video recording to local storage, external output activation

ELECTRICAL

Power	12 Vdc 1.92 A; 24 Vac 50/60 Hz 1.4 A; 42.5-57 Vdc 0.53-0.4 A (PoE 802.3at, Class 4)
Power Consumption	12 Vdc max. 13.8 W; 24 Vac max. 15.5 W; PoE max. 17 W

PHYSICAL

Construction	Metal housing, polycarbonate bubble
Dimensions (D x H)	Ø 155 x 103 mm (Ø 6.1 x 4.06 in)
Weight	900 g (2.0 lb)

ENVIRONMENTAL

Operating Temperature	-40 °C to +50 °C (-40 °F to +122 °F) – IR On -30 °C to +60 °C (-22 °F to +140 °F) – IR Off*
Humidity	10 - 90% RH, non-condensing
Ingress Protection Rating	IP66, IP67
Impact Rating	IK10

USER CONNECTIONS

Alarm	Digital input 2; Digital output 2
Audio	1 x Audio in; 1 x Audio out
Ethernet	RJ45 10/100 Base-T
Power	DC/AC Terminal Block/RJ-45 PoE

GENERAL

Local Storage	MicroSD/MicroSDHC/MicroSDXC memory card up to 1TB (not included)
LED Indicator	Power, Activity
Included Accessories	Quick installation guide, alignment sticker, screw pack, desiccant bag, waterproof accessory bag

REGULATORY

Regulatory Model	C4501A
Safety	UL 62368-1, CSA 62368-1, IEC/EN 62368-1
EMC	EN 55032, EN61000-3-2, EN61000-3-3, FCC Part 15 Subpart B, ICES-003, CISPR 32, AS/ NZS CISPR 32, EN 55035
Environmental	RoHS, WEEE
Compliance Marking	CE, cULus, RCM, WEEE, UKCA, NOM

ORDERING INFORMATION

CAMERA	
41094-101	AI4 IR Dome
ASSESSORIES	
41191	MNT C45XX Wall Bracket
41192	MNT C45XX Electrical Box Adapter
41190	MNT C45XX NPT Cap Adapter
41193	MNT C45XX Conduit Adapter
36989	1.5" NPT Wall Mount with Back Box
41517	1.5" NPT Wall Mount
41516	MNT MINIDOME BRKT PENDANT
36990	Pendant Mount with Back Box
27639	Corner Mount Adapter
41515	Pole Mount Adapter

5-year warranty:

- Option for Advance Replacement or Repair and Return.
- No need to issue a PO prior to receiving the replacement.
- March Networks incurs all shipping costs — both ways — for Advance Replacements.

* Internal Testing