

## AXIS M3098-H Dome Camera

### AI-powered 8 MP recessed mini dome

This AI-powered recessed dome is designed for discreet installation in indoor drop ceilings, with only the camera dome and covering visible. It offers a wide field of view and delivers great image quality even in challenging light conditions. It comes with AXIS Object Analytics preinstalled to detect, classify, track, and count humans. It also includes an acoustic sensor with AXIS Audio Analytics, which notifies you whenever something relevant happens, even when there's no visual indication. Selected markets feature direct installation view in AXIS Installer app. Furthermore, Axis Edge Vault safeguards the device and offers FIPS 140-3 Level 3 certified secure key storage and operations.

- > [Great image quality in 8 MP](#)
- > [Discreet, recessed camera](#)
- > [Forensic WDR and Lightfinder](#)
- > [AI-powered audio and video analytics](#)
- > [Built-in cybersecurity with Axis Edge Vault](#)



# AXIS M3098-H Dome Camera

## Camera

### Image sensor

1/1.8" progressive scan RGB CMOS  
Pixel size 2.0 µm

### Lens

3.76 mm, F2.0  
Horizontal field of view: 124°  
Vertical field of view: 66°  
M12 mount, fixed iris, IR corrected

### Day and night

Automatic IR-cut filter  
Hybrid IR filter

### Minimum illumination

Color: 0.19 lux at 50 IRE, F2.0  
B/W: 0.05 lux at 50 IRE, F2.0

### Shutter speed

1/66000 s to 1/5 s

### Camera adjustment

Pan ±175°, tilt ±57°, rotation ±175°

## System on chip (SoC)

### Model

CV75

### Memory

2 GB RAM, 8 GB Flash

### Compute capabilities

Deep learning processing unit (DLPU)

## Video

### Video compression

H.264 (MPEG-4 Part 10/AVC) Main and High Profiles  
H.265 (MPEG-H Part 2/HEVC) Main Profile  
Motion JPEG

### Resolution

16:9: 3840x2160 to 640x360  
4:3: 1440x1080 to 320x240

### Frame rate

Up to 12/15 fps (50/60 Hz) with H.264 and H.265<sup>1</sup> in all resolutions in 8 MP mode  
Up to 25/30 fps (50/60 Hz) with H.264 and H.265<sup>1</sup> in all resolutions in 4 MP mode

### Video streaming

Multiple, individually configurable streams in H.264, H.265 and Motion JPEG  
Axis Zipstream technology in H.264 and H.265  
Controllable frame rate and bandwidth  
VBR/ABR/MBR H.264/H.265

### WDR

Forensic WDR: Up to 120 dB depending on scene

### Multi-view streaming

2 individually cropped out view areas

### Image settings

Saturation, contrast, brightness, sharpness, white balance, day/night threshold, local contrast, tone mapping, exposure mode, exposure zones, compression, rotation: 0°, 90°, 180°, 270° including corridor format, mirroring, dynamic text and image overlay, privacy masks  
Scene profiles: forensic, vivid

### Image processing

Axis Zipstream, Forensic WDR, Lightfinder

### Pan/Tilt/Zoom

Digital PTZ

## Network

### Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS<sup>2</sup>, HTTP/2, TLS<sup>2</sup>, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP<sup>®</sup>, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, PTP, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)

1. Reduced frame rate in Motion JPEG

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).

## System integration

### Application Programming Interface

Open API for software integration, including VAPIX®, metadata and AXIS Camera Application Platform (ACAP); specifications at [axis.com/developer-community](https://axis.com/developer-community).

One-click cloud connection

ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specifications at [onvif.org](https://onvif.org)

### Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at [axis.com/vms](https://axis.com/vms).

### Onscreen controls

Day/night shift

Wide dynamic range

Privacy masks

### Edge-to-edge

Siren and light pairing

### Event conditions

Application

Audio analytics: audio level above threshold, coughing fit detected, glass break detected, scream detected, shout detected, speech detected, SPL: Above threshold upper, SPL: Below threshold lower

Device status: above/below/within operating temperature, Audit logs, IP address blocked/removed, live stream active, network lost, new IP address, system ready

Edge storage: recording ongoing, storage disruption, storage health issues detected

I/O: manual trigger, virtual input is active

MQTT: MQTT client connected

Scheduled and recurring: schedule

Video: average bitrate degradation, day-night mode, tampering

### Event actions

Day-night mode

LEDs: flash status LED, flash status LED while the rule is active

MQTT: send MQTT publish message

Notification: HTTP, HTTPS, TCP and email

Overlay text

Recordings: record video, record video while the rule is active

Security: erase configuration

SNMP trap messages: send, send while the rule is active

Images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email

WDR mode

### Built-in installation aids

Pixel counter, level grid

## Analytics

### Applications

Included

AXIS Object Analytics, AXIS Image Health Analytics, AXIS Audio Analytics, AXIS Scene Metadata, AXIS Live Privacy Shield<sup>3</sup>, AXIS Video Motion Detection

Supported

Support for AXIS Camera Application Platform enabling installation of third-party applications, see [axis.com/acap](https://axis.com/acap)

### AXIS Object Analytics

**Object classes:** humans, vehicles (types: cars, buses, trucks, bikes, other)

**Scenarios:** line crossing, object in area, time in area, crossline counting, occupancy in area, tailgating detection, PPE monitoring<sup>BETA</sup>, motion in area, motion line crossing

Up to 10 scenarios

**Other features:** triggered objects visualized with color-coded bounding boxes

Polygon include/exclude areas

Perspective configuration

ONVIF Motion Alarm event

### AXIS Image Health Analytics

**Detection settings:**

Tampering: blocked image, redirected image

Image degradation: blurred image, underexposed image

**Other features:** sensitivity, validation period

3. Available for download

## AXIS Audio Analytics

Features: sound pressure level, adaptive audio detection, audio classification

Audio classes: scream, shout, glass break, speech, coughing fit

Event metadata: audio detections, classifications, sound pressure level

## AXIS Scene Metadata

Object classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates

Object attributes: vehicle color, upper/lower clothing color, bag, confidence, position

## Approvals

### Product markings

CE, FCC, ICES, UL, RCM<sup>4</sup>, BSMI<sup>4</sup>, KC<sup>4</sup>, NCC<sup>4</sup>, TELEC<sup>4</sup>, VCCI<sup>4</sup>

### Supply chain

TAA compliant

### EMC

CISPR 35, CISPR 32 Class B, EN 55035,

EN 55032 Class B, EN 61000-6-1, EN 61000-6-2

Australia/New Zealand: RCM AS/NZS CISPR 32 Class B<sup>4</sup>

Canada: ICES(B)/NMB(B)

Japan: VCCI Class B<sup>4</sup>

Korea: KS C 9835<sup>4</sup>, KS C 9832 Class B<sup>4</sup>

USA: FCC Part 15 Subpart B Class B

### Safety

CAN/CSA C22.2 No. 62368-1 ed. 3,

IEC/EN/UL 62368-1 ed. 3, EN 62311<sup>4</sup>, NOM-001<sup>5</sup>,

UL 2043

### Environment

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6,

IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78,

IEC/EN 60529 IP42

### Wireless

EN 62311<sup>4</sup>, EN 300328<sup>4</sup>, EN 301489-1<sup>4</sup>,

EN 301489-17<sup>4</sup>, FCC Part 15 Subpart C<sup>4</sup>,

FCC Part 2 Subpart J<sup>4</sup>, MIC<sup>4</sup>, NCC<sup>4</sup>, RSS-102<sup>4</sup>, RSS-247<sup>4</sup>,

RSS-Gen<sup>4</sup>

### Network

NIST SP500-267

## Cybersecurity

ETSI EN 303 645, BSI IT Security Label, FIPS 140, EN 18031-1<sup>4</sup>

## Cybersecurity

### Edge security

Software: Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, Axis Cryptographic Module (FIPS 140-2 level 1)

Hardware: Axis Edge Vault cybersecurity platform

Secure keystore: secure element (CC EAL 6+, FIPS 140-3 Level 3), system-on-chip security (TEE)

Axis device ID, signed video, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)

### Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)<sup>6</sup>,

IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR,

HTTPS/HSTS<sup>6</sup>, TLS v1.2/v1.3<sup>6</sup>, Network Time Security

(NTS), X.509 Certificate PKI, host-based firewall

### Documentation

*AXIS OS Hardening Guide*

*Axis Vulnerability Management Policy*

*Axis Security Development Model*

AXIS OS Software Bill of Material (SBOM)

To download documents, go to [axis.com/support/cybersecurity/resources](https://axis.com/support/cybersecurity/resources)

To read more about Axis cybersecurity support, go to [axis.com/cybersecurity](https://axis.com/cybersecurity)

## General

### Casing

IP42-rated

Polycarbonate hard-coated dome

Color: white NCS S 1002-B

For repainting instructions, go to the product's support page. For information about the impact on warranty, go to [axis.com/warranty-implication-when-repainting](https://axis.com/warranty-implication-when-repainting).

### Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1

Class 2, max 3.9 W, typical (heater off) 3.4 W

Features: dynamic power mode, power meter

4. Not valid for ROW variants

5. Only valid for ROW variants

6. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).

## Wireless interface

Bluetooth® 5.4 Low Energy<sup>7</sup> <sup>8</sup>

Bluetooth profiles: none<sup>8</sup>

Features: direct installation view through AXIS Installer mobile app<sup>8</sup>

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## Environmental sensors

Environmental sensors through portcast technology accessories. For more information, see *Optional accessories*.

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## Connectors

Network: RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE

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## Sensor

Acoustic sensor

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## Storage

Support for microSD/microSDHC/microSDXC card

Support for SD card encryption (AES-XTS-Plain64 256bit)

Recording to network-attached storage (NAS)

For SD card and NAS recommendations see *axis.com*

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## Operating conditions

Temperature: 0 °C to 45 °C (32 °F to 113 °F)

Humidity: 10–85% RH (non-condensing)

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## Storage conditions

Temperature: -40 °C to 65 °C (-40 °F to 149 °F)

Humidity: 5–95% RH (non-condensing)

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## Dimensions

For the overall product dimensions, see the dimension drawing in this datasheet.

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## Weight

235 g (0.52 lb)

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## Box content

Camera, installation guide, owner authentication key

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## System tools

AXIS Site Designer, AXIS Device Manager, AXIS Installer, product selector, accessory selector, lens calculator

Available at *axis.com*

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## Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

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## Warranty

5-year warranty, see *axis.com/warranty*

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## Software support

New feature development until 2030 (AXIS OS 12, 13 and 14)

Support until 2035-12-31 (AXIS OS LTS 2030–2035)

Read more about the AXIS OS lifecycle at *help.axis.com/axis-os*

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## Part numbers

Available at *axis.com/products/axis-m3098-h#part-numbers*

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## Optional accessories

### Portcast

AXIS D6210 Air Quality Sensor<sup>9</sup>

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### Installation

AXIS T8415 Wireless Installation Tool

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### Storage

AXIS Surveillance Cards

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Smoked dome

For more accessories, go to *axis.com/products/axis-m3098-h#compatible-products*

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## Sustainability

### Substance control

PVC free, BFR/CFR free in accordance with JEDEC/ECA Standard JS709

RoHS in accordance with EU RoHS Directive 2011/65/EU and 2015/863, and standard EN IEC 63000:2018

REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see *echa.europa.eu*

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7. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Axis Communications AB is under license. Other trademarks and trade names are those of their respective owners.

8. Not valid for ROW variants

9. Power requirement with accessory connected: PoE IEEE 802.3af Class 3, supplied by a compliant power sourcing equipment.

## **Materials**

Renewable carbon-based plastic content: 65%  
(recycled: 21%, bio-based: 42%, carbon capture based: 2%)

Screened for conflict minerals in accordance with OECD guidelines

To read more about sustainability at Axis, go to [axis.com/about-axis/sustainability](https://axis.com/about-axis/sustainability)

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## **Environmental responsibility**

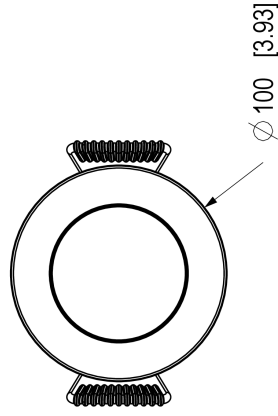
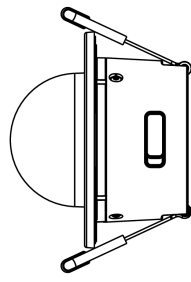
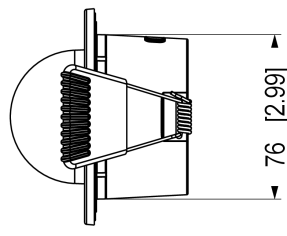
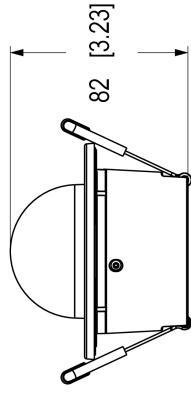
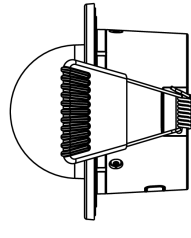
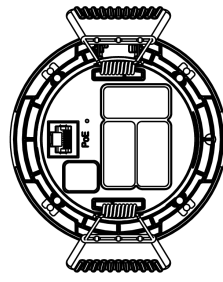
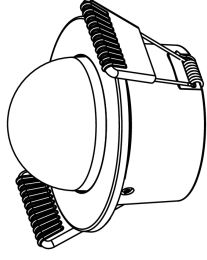
[axis.com/environmental-responsibility](https://axis.com/environmental-responsibility)

Axis Communications is a signatory of the UN Global Compact, read more at [unglobalcompact.org](https://unglobalcompact.org)

## Detect, Observe, Recognize, Identify (DORI)

	DORI definition	Distance
Detect	25 px/m (8 px/ft)	75 m (250 ft)
Observe	63 px/m (19 px/ft)	30 m (98 ft)
Recognize	125 px/m (38 px/ft)	15 m (49 ft)
Identify	250 px/m (76 px/ft)	8 m (30 ft)

The DORI values are calculated using pixel densities for different use cases as recommended by the EN-62676-4 standard. The calculations use the center of the image as the reference point and consider lens distortion. The possibility to recognize or identify a person or object depends on factors such as object motion, video compression, lighting conditions, and camera focus. Use margins when planning. The pixel density varies across the image, and the calculated values can differ from the distances in the real world.



Dimensions in mm [incht]

Date	Version	Scale
2026 Jan-21	M13	1:2
Drawing Number	Size	Sheet
3510048	A3	1(1)

# AXIS M3098-H Dome Camera



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## Highlighted capabilities

### AXIS Audio Analytics

AXIS Audio Analytics uses adaptive audio detection to generate alarms on sudden increases in sound volume. With AI-based classifiers, it can detect screaming and shouting. You can also get extra confirmation by combining AXIS Audio Analytics with video analytics. This smart application only transmits metadata, ensuring privacy is safeguarded. A core feature of AXIS OS, AXIS Audio Analytics comes preinstalled at no extra cost.

### AXIS Object Analytics

AXIS Object Analytics is a preinstalled, multifeatured video analytics that detects and classifies humans, vehicles, and types of vehicles. Thanks to AI-based algorithms and behavioral conditions, it analyzes the scene and their spatial behavior within – all tailored to your specific needs. Scalable and edge-based, it requires minimum effort to set up and supports various scenarios running simultaneously.

### Axis Edge Vault

Axis Edge Vault is the hardware-based cybersecurity platform that safeguards the Axis device. It forms the foundation that all secure operations depend on and offer features to protect the device's identity, safeguard its integrity and protect sensitive information from unauthorized access. For instance, **secure boot** ensures that a device can boot only with **signed OS**, which prevents physical supply chain tampering. With signed OS, the device is also able to validate new device software before accepting to install it. And the **secure keystore** is the critical building-block for protecting cryptographic information used for secure communication (IEEE 802.1X, HTTPS, Axis device ID, access control keys etc.) against malicious extraction in the event of a security breach. The secure keystore and secure connections are provided through a Common Criteria or FIPS 140 certified hardware-based cryptographic computing module.

Furthermore, signed video ensures that video evidence can be verified as untampered. Each camera uses its unique video signing key, which is securely stored in the secure keystore, to add a signature into the video stream allowing video to be traced back to the Axis camera from where it originated.

To read more about Axis Edge Vault, go to [axis.com/solutions/edge-vault](https://axis.com/solutions/edge-vault).

### Direct installation view

Direct installation view is a camera feature that enables fast setup using Bluetooth® technology to view the camera stream in real time during the installation phase.

### Forensic WDR

Axis cameras with wide dynamic range (WDR) technology make the difference between seeing important forensic details clearly and seeing nothing but a blur in challenging light conditions. The difference between the darkest and the brightest spots can spell trouble for image usability and clarity. Forensic WDR effectively reduces visible noise and artifacts to deliver video tuned for maximal forensic usability.

### Lightfinder

The Axis Lightfinder technology delivers high-resolution, full-color video with a minimum of motion blur even in near darkness. Because it strips away noise, Lightfinder makes dark areas in a scene visible and captures details in very low light. Cameras with Lightfinder discern color in low light better than the human eye. In surveillance, color may be the critical factor to identify a person, an object, or a vehicle.

For more information, see [axis.com/glossary](https://axis.com/glossary)