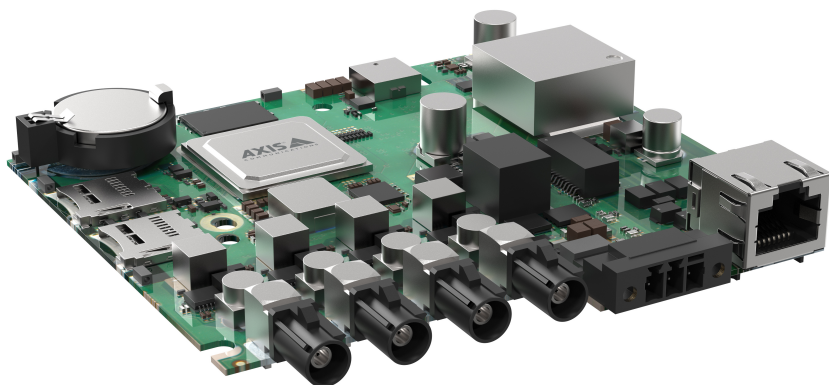


## AXIS F9104-B Main Unit

### 4-channel modular barebone unit

AXIS F9104-B is excellent for building customized video solutions. Sold without a casing, this UL recognized barebone main unit is ideal for integration into a UL certified end-product. Based on a divided camera concept, it can be installed indoors or inside vehicles. It supports four HDTV 1080p video streams at 30 fps on all channels and requires only one video management software (VMS) license. Furthermore, it offers built-in cybersecurity features such as Axis Edge Vault to protect your Axis device ID and simplify authorization of Axis devices on your network.

- > **UL recognized component**
- > **Multiple sensor and cable options**
- > **Easy integration and installation**
- > **1080p at 30 fps on 4-channels**
- > **Built-in cybersecurity with Axis Edge Vault**



# AXIS F9104-B Main Unit

## System on chip (SoC)

### Model

ARTPEC-7

### Memory

2x 1024 MB RAM, 512 MB Flash

## Video

### Video compression

H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles

H.265 (MPEG-H Part 2/HEVC) Main Profile  
Motion JPEG

### Resolution

Up to 3840x2160 8Mp<sup>1</sup>

Up to 2592x1944 5Mp<sup>1</sup>

Up to 1920x1080 HDTV 2Mp<sup>1</sup>

### Frame rate

Up to 30/25 fps (60/50 Hz) in 1080p (WDR mode) and  
up to 60/50 fps (60/50 Hz) fps in 720p<sup>2</sup>

### 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

Low latency mode

Video streaming indicator

### Image settings

Contrast, brightness, sharpness, Forensic WDR, fixed  
orientation aid, white balance, tone mapping, exposure  
control, exposure zones, compression, rotation: 0°, 90°,  
180°, 270°, mirroring, polygon privacy mask, control  
queue

## Network

### Network protocols

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

## System integration

### Application Programming Interface

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

One-click cloud connection

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

### Event conditions

Device status, edge storage, scheduled event, video

### Event actions

Send images, publish MQTT, send notifications, overlay  
text, recordings, SNMP trap messages, status LED, video  
clips

### Data streaming

Event data

## Analytics

### Applications

#### Included

AXIS Video Motion Detection

#### Supported

Tampering alarm

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

1. Resolution varies depending on the sensor unit used.

2. For main units and sensor units capture mode specifications, see capture mode table.

3. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](https://openssl.org)), and cryptographic software  
written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)).

## AXIS Object Analytics

**Sensors supported:** one per unit

**Object classes:** humans, vehicles

**Scenarios:** line crossing, object in area, crossline counting, occupancy in area

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 Scene Metadata

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

**Object attributes:** confidence, position

## Approvals

### Safety

UL recognized component, IS 13252

### Network

NIST SP500-267

### Cybersecurity

ETSI EN 303 645, BSI IT Security Label, FIPS-140

## 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), AES-XTS-Plain64 256bit SD card encryption

**Hardware:** Axis Edge Vault cybersecurity platform Secure element (CC EAL 6+), Axis device ID, secure keystore, signed video, secure boot

### Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)<sup>4</sup>, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS<sup>4</sup>, TLS v1.2/v1.3<sup>4</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

### Sustainability

PVC free

### Power

Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 10–48 V DC, typical 9 W, max 25.5 W

### Connectors

RJ45 for 10BASE-T/100BASE-TX/1000BASE-T PoE

4x FAKRA for sensor units

3-pin terminal block for 10–48 V DC input

### Storage

Support for microSD/microSDHC/microSDXC card and encryption

Recording to network-attached storage (NAS)

For SD card and NAS recommendations see [axis.com](https://axis.com)

### Operating conditions

–40 °C to 60 °C (–40 °F to 140 °F)

Humidity 10–85% RH (non-condensing)

### Storage conditions

–40 °C to 65 °C (–40 °F to 149 °F)

Humidity 5–95% RH (non-condensing)

### Dimensions

21 x 107 x 110 mm (0.8 x 4.2 x 4.3 in)

### Weight

120 g (0.3 lb)

### Required hardware

AXIS TU6004-E Cable, AXIS TU6005 Plenum Cable, AXIS F21 Sensor Unit, AXIS F4105-LRE Dome Sensor, AXIS F7225-RE Pinhole Sensor

### Included accessories

Installation guide, Windows® decoder 1-user license

4. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](https://openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

**Optional accessories**

AXIS Surveillance Cards

TU6001 Connector 3-pin

For more accessories, see [axis.com](http://axis.com)

---

**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](http://axis.com/vms).

---

**Languages**

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

---

**Warranty**

5-year warranty, see [axis.com/warranty](http://axis.com/warranty)

## Capture mode

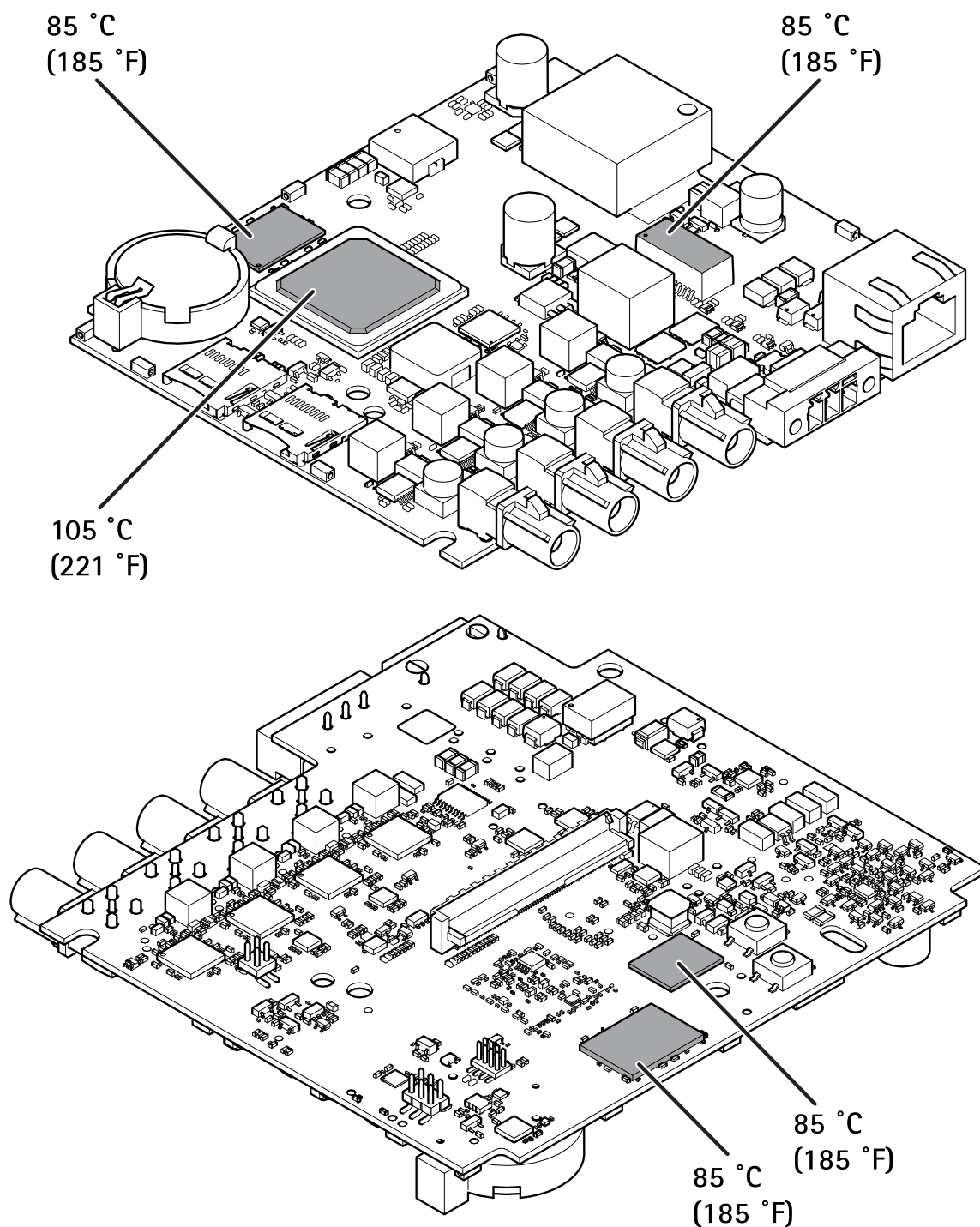
Capture mode includes resolution, frame rate, and shutter speed for the main unit in combination with different sensor units.

Sensor unit	Resolutions	Exposure	Frame rate (fps) (60/50Hz)	Shutter speed (seconds)
2 MP sensor units	1080p: 1920x1080	Without WDR	30/25	1/20000 to 1.5 s
		WDR	30/25	1/20000 to 1.5 s
	720p: 1280x720 <sup>5</sup>	Without WDR	60/50	1/32500 to 1/2 s
5 MP sensor units	5 MP: 2592x1944	Without WDR	10/10	1/16000 s to 1 s
		WDR	10/10	1/11000 s to 2 s
	Quad HD: 2560x1440	Without WDR	15/12.5	1/15000 s to 1 s
		WDR	15/12.5	1/11000 s to 2 s
8 MP sensor units	8 MP: 3840x2160 <sup>6</sup>	Without WDR	5/5	

5. No WDR support. To get WDR, use 1080p: 1920x1080 and scale down.

6. No WDR support yet.

## AXIS F9104-B Main Unit



1 Maximum allowable temperatures. If the ambient temperature is 35 °C (95 °F) or higher, the temperature of the components increases and they must be cooled.