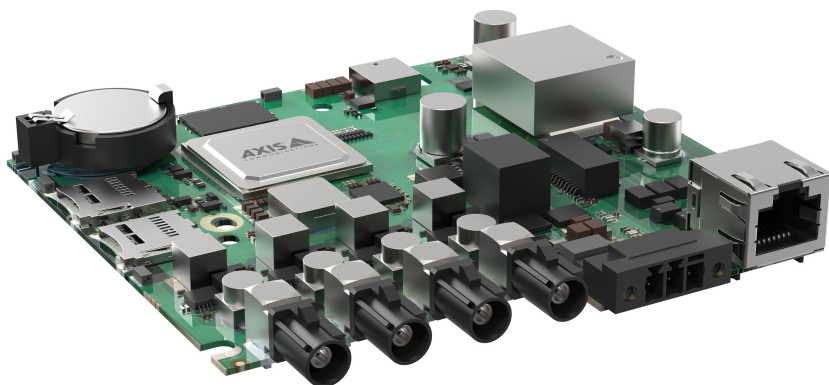


AXIS F9104-B Main Unit

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⁽¹⁾

Up to 2592x1944 5Mp⁽¹⁾

Up to 1920x1080 HDTV 2Mp⁽¹⁾

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⁽²⁾

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⁽³⁾,
HTTP/2, TLS⁽³⁾, 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.

One-click cloud connection

ONVIF® Profile G and ONVIF® Profile S, specification at
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

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), and cryptographic software
written by Eric Young (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)⁽⁴⁾, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS⁽⁴⁾, TLS v1.2/v1.3⁽⁴⁾, 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

To read more about Axis cybersecurity support, go to 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

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), and cryptographic software written by Eric Young (ey@cryptsoft.com).

Optional accessories

AXIS Surveillance Cards

TU6001 Connector 3-pin

For more accessories, see axis.com

Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, and video management software from Axis' partners available at 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

Capture mode

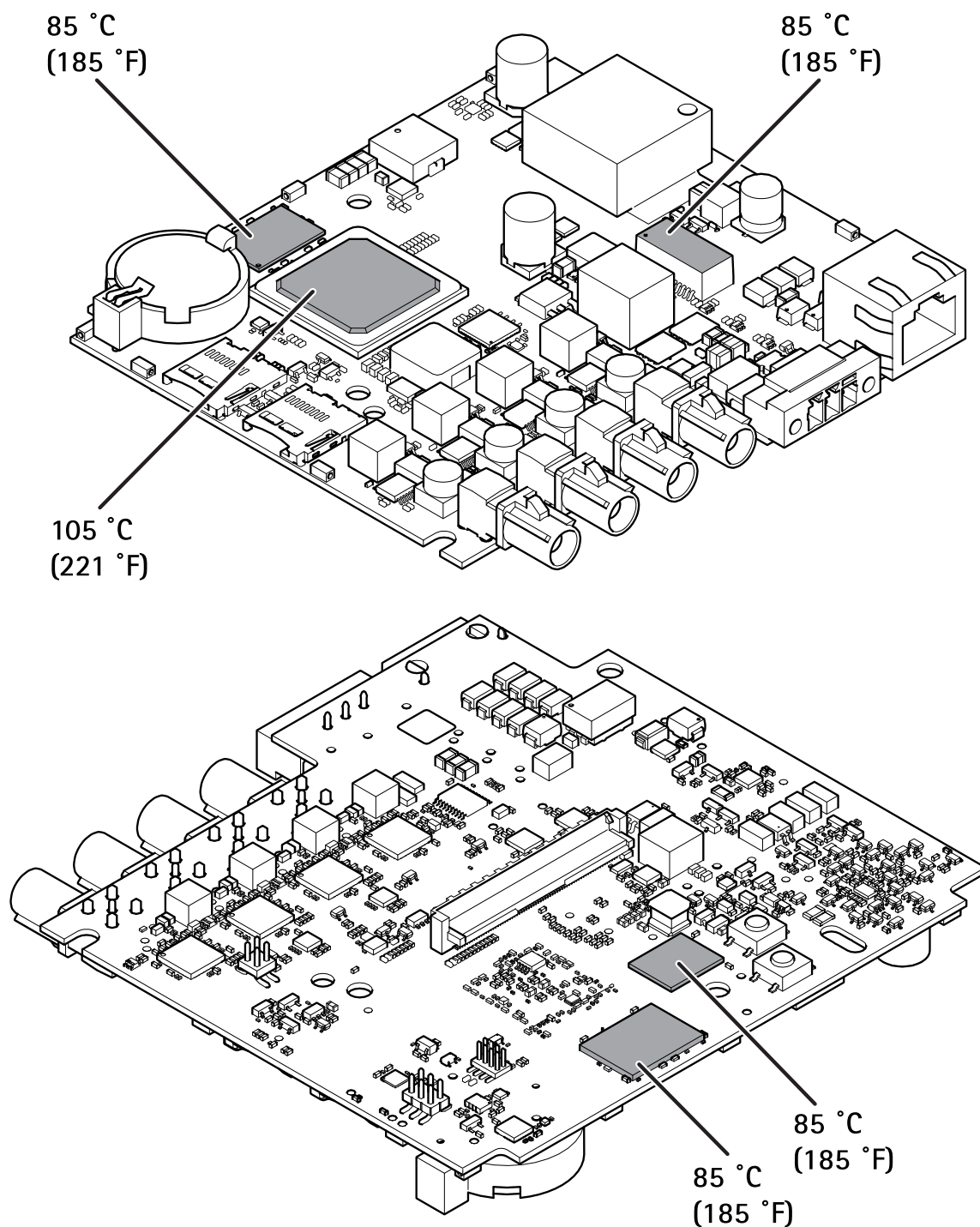
Capture mode includes resolution, frame rate, and shutter speed for the main unit in combination with different sensor units.

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 ⁽⁵⁾	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 ⁽⁶⁾	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.