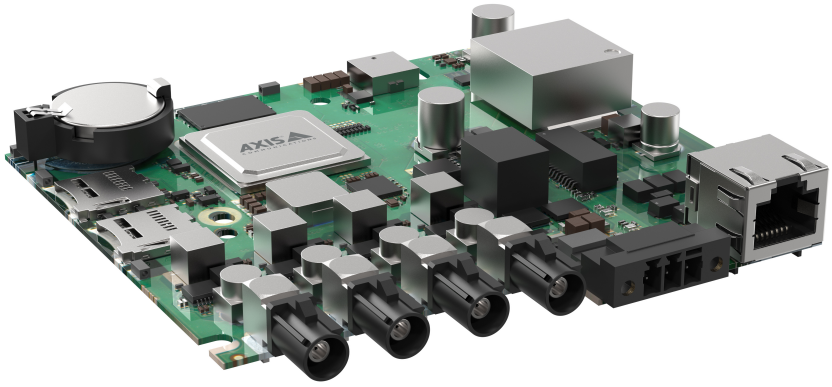
AXIS F9104-B Main Unit

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
- > Bulit-in cybersecurity with Axis Edge Vault



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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, 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 (eay@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, AXIS Camera Station 5, 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	30/12.5	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.

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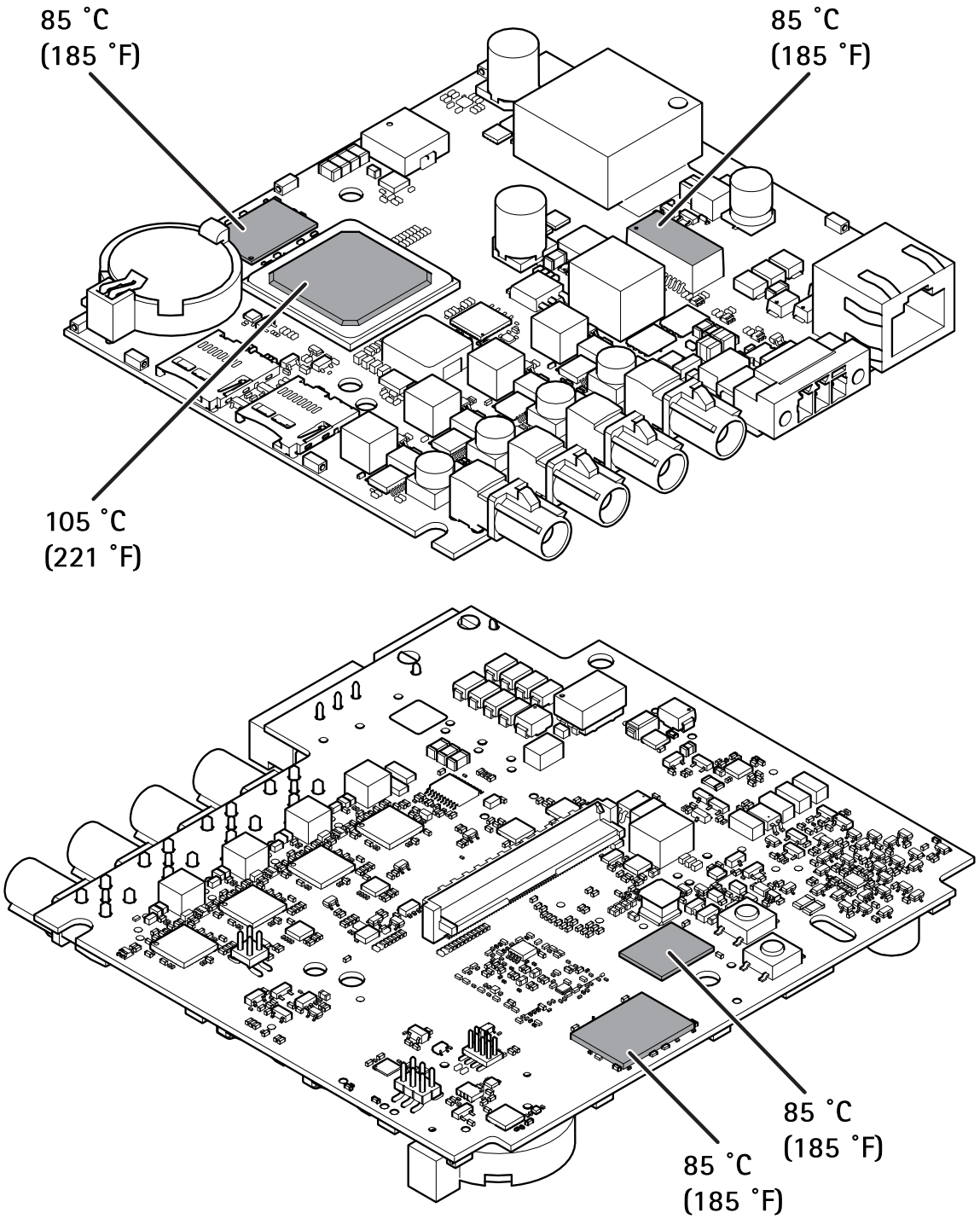

1 Maximum allowable temperatures. If the ambient temperature is 35 °C (95 °F) or higher, the temperature of the components increases and they must be cooled.