AXIS F9114 Main Unit

4-channel main unit with audio and I/O

AXIS F9114 is designed for use with up to four sensor units in discreet video surveillance applications. And it requires just one video management software (VMS) license. Ideal for emergency vehicles and buses, it features ignition control with controlled shutdown. AXIS Sensor Metrics Dashboard ACAP comes pre-installed in this main unit. The ACAP gathers information from the connected sensor devices and stores the data directly on the main unit SD-card. The built-in accelerometer alerts you if the vehicle deviates from normal movement. Furthermore, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis devices on your network.

> 1080p at 30 fps on all 4-channels
> Rugged design and connectors
> Multiple sensor and cable options
> Accelerometer, GPS, modbus support
> Built-in cybersecurity with Axis Edge Vault

AXIS F9114 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 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

Audio

Streaming
Two-way, full duplex

Encoding
24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz
Configurable bit rate

Input/output
2x external microphone input or line input, 1x line output, ring power, digital audio input

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; specifications at *axis.com*
One-click cloud connection
ONVIF® Profile G and ONVIF® Profile S, specification at *onvif.org*

Event conditions
Device status, digital audio, edge storage, I/O, PTZ, scheduled event, video
MQTT subscribe

Event actions
Play audio clip, toggle I/O, send images, MQTT publish, send notifications, overlay text, recordings, SNMP trap messages, status LED, video clips

Data streaming
Event data

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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).*

Analytics

Applications
Included
AXIS Object Analytics, AXIS Scene Metadata
AXIS Video Motion Detection, audio detection
AXIS Sensor Metrics Dashboard:
GPS over serial: Protocol: NMEA 0183, Port mode:
RS232
Modbus over serial: Protocol: Modbus RTU, Port mode:
RS485 2-wire
Modbus over IP: Protocol: Modbus TCP, Port mode:
Ethernet on switch
Supported
Tampering alarm
Support for AXIS Camera Application Platform enabling
installation of third-party applications, see *axis.com/
acap*

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

EMC
CISPR 24, EN 55032 Class A, EN 55035, EN 61000-3-2,
EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, EAC,
ECE R10 rev.05 (E-mark)
Australia/New Zealand: RCM AS/NZS CISPR 32 Class A
Canada: ICES-3(A)/NMB-3(A)
Japan: VCCI Class A
Korea: KC KN32 Class A, KC KN35
USA: FCC Part 15 Subpart B Class A

Safety
CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1,
UN ECE R118, IS 13252

Environment
IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14,
IEC 60068-2-27, IEC 60068-2-64,
IEC TR 60721-4-5 Class 5M3, IEC/EN 60529 IP3X,
IEC/EN 61373 Category 1 Class B,
NEMA TS 2 (2.2.7-2.2.9)

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

Casing
IP3X-rated
Aluminum casing
Color: black NCS S 9000-N

Sustainability
PVC free

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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).*

Power

Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4
10–48 V DC, typical 11 W, max 25.5 W

Connectors

RJ45 for 10BASE-T/100BASE-TX/1000BASE-T PoE
4x FAKRA for sensor units
6-pin terminal block for 4x configurable I/Os (12 V DC
output), max load 50 mA
3.5 mm mic/line in, 3.5 mm line out
5-pin terminal block RS232/RS485
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)
Maximum temperature according to NEMA TS 2 (2.2.7):
74 °C (165 °F)
Humidity 10–95% RH (non-condensing)

Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)
Humidity 5-95% RH (non-condensing)

Dimensions

51 x 120 x 120 mm (2 x 4.7 x 4.7 in)

Weight

675 g (1.5 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

Optional accessories

AXIS Surveillance Cards
TU6001 Connector 3-pin, TU6008 Connector 5-pin,
TU6009 Connector 6-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	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.*