

# 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)

|               |                              |
|---------------|------------------------------|
| <b>Model</b>  | ARTPEC-7                     |
| <b>Memory</b> | 2x 1024 MB RAM, 512 MB Flash |

## Video

|                          |                                                                                                                                                                                                                                                  |
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| <b>Video compression</b> | H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles<br>H.265 (MPEG-H Part 2/HEVC) Main Profile<br>Motion JPEG                                                                                                                            |
| <b>Resolution</b>        | 1920x1080 HDTV 1080p                                                                                                                                                                                                                             |
| <b>Frame rate</b>        | Up to 30 fps in 1080p (WDR mode) and up to 60 fps in 720p                                                                                                                                                                                        |
| <b>Video streaming</b>   | Multiple, individually configurable streams in H.264, H.265 and Motion JPEG<br>Axis Zipstream technology in H.264 and H.265<br>Controllable frame rate and bandwidth<br>VBR/ABR/MBR H.264/H.265<br>Low latency mode<br>Video streaming indicator |
| <b>Image settings</b>    | 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

|                           |                                                                                                                  |
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| <b>Audio streaming</b>    | Two-way, full duplex                                                                                             |
| <b>Audio encoding</b>     | 24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz<br>Configurable bit rate |
| <b>Audio input/output</b> | 2x external microphone input or line input, 1x line output, ring power, digital audio input                      |

## Network

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| <b>Network protocols</b> | IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS, HTTP/2, TLS, 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) |
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## System integration

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| <b>Application Programming Interface</b> | Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at <a href="http://axis.com">axis.com</a><br>One-click cloud connection<br>ONVIF® Profile G and ONVIF® Profile S, specification at <a href="http://onvif.org">onvif.org</a> |
| <b>Event conditions</b>                  | Device status, digital audio, edge storage, I/O, PTZ, scheduled event, video<br>MQTT subscribe                                                                                                                                                                                       |
| <b>Event actions</b>                     | Play audio clip, toggle I/O, send images, MQTT publish, send notifications, overlay text, power saving mode, recordings, SNMP trap messages, status LED, video clips                                                                                                                 |

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| <b>Data streaming</b> | Event data |
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## Analytics

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| <b>Applications</b>          | <b>Included</b><br>AXIS Object Analytics, Scene metadata<br>AXIS Video Motion Detection, audio detection<br>AXIS Sensor Metrics Dashboard:<br>GPS over serial: Protocol: NMEA 0183, Port mode: RS232<br>Modbus over serial: Protocol: Modbus RTU, Port mode: RS485 2-wire<br>Modbus over IP: Protocol: Modbus TCP, Port mode: Ethernet on switch<br><b>Supported</b><br>Tampering alarm<br>Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="http://axis.com/acap">axis.com/acap</a> |
| <b>AXIS Object Analytics</b> | <b>Object classes:</b> humans, vehicles<br><b>Scenarios:</b> line crossing, object in area, crossline counting, occupancy in area<br>Up to 10 scenarios<br><b>Other features:</b> triggered objects visualized with color-coded bounding boxes<br>Polygon include/exclude areas<br>Perspective configuration<br>ONVIF Motion Alarm event                                                                                                                                                                                                        |

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| <b>Scene metadata</b> | <b>Object classes:</b> humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates<br><b>Object attributes:</b> confidence, position |
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## Approvals

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| <b>EMC</b>           | 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)<br><b>Australia/New Zealand:</b> RCM AS/NZS CISPR 32 Class A<br><b>Canada:</b> ICES-3(A)/NMB-3(A)<br><b>Japan:</b> VCCI Class A<br><b>Korea:</b> KC KN32 Class A, KC KN35<br><b>USA:</b> FCC Part 15 Subpart B Class A |
| <b>Safety</b>        | CAN/CSA C22.2 No. 62368-1, IEC/EN/JUL 62368-1, UN ECE R118, IS 13252                                                                                                                                                                                                                                                                              |
| <b>Environment</b>   | 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)                                                                                                                                                             |
| <b>Network</b>       | NIST SP500-267                                                                                                                                                                                                                                                                                                                                    |
| <b>Cybersecurity</b> | ETSI EN 303 645                                                                                                                                                                                                                                                                                                                                   |

## Cybersecurity

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| <b>Edge security</b>    | <b>Software:</b> Signed firmware, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection, AES-XTS-Plain64 256bit SD card encryption<br><b>Hardware:</b> Axis Edge Vault cybersecurity platform<br>Secure element (CC EAL 6+), Axis device ID, secure keystore, signed video, secure boot |
| <b>Network security</b> | IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall                                                                                                                                                                                                               |

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| <b>Documentation</b> | <i>AXIS OS Hardening Guide</i><br><i>Axis Vulnerability Management Policy</i><br><i>Axis Security Development Model</i><br>AXIS OS Software Bill of Material (SBOM)<br>To download documents, go to <a href="http://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a><br>To read more about Axis cybersecurity support, go to <a href="http://axis.com/cybersecurity">axis.com/cybersecurity</a> |
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## General

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| <b>Casing</b>               | IP3X-rated<br>Aluminum casing<br>Color: black NCS S 9000-N                                                                                                                                                                                                                         |
| <b>Sustainability</b>       | PVC free                                                                                                                                                                                                                                                                           |
| <b>Power</b>                | Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4<br>10-48 V DC, typical 11 W, max 25.5 W                                                                                                                                                                                      |
| <b>Connectors</b>           | RJ45 for 10BASE-T/100BASE-TX/1000BASE-T PoE<br>4x FAKRA for sensor units<br>6-pin terminal block for 4x configurable I/Os (12 V DC output), max load 50 mA<br>3.5 mm mic/line in, 3.5 mm line out<br>5-pin terminal block RS232/RS485<br>3-pin terminal block for 10-48 V DC input |
| <b>Storage</b>              | Support for microSD/microSDHC/microSDXC card and encryption<br>Recording to network-attached storage (NAS)<br>For SD card and NAS recommendations see <a href="http://axis.com">axis.com</a>                                                                                       |
| <b>Operating conditions</b> | -40 °C to 60 °C (-40 °F to 140 °F)<br>Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F)<br>Humidity 10-95% RH (non-condensing)                                                                                                                                    |
| <b>Storage conditions</b>   | -40 °C to 65 °C (-40 °F to 149 °F)<br>Humidity 5-95% RH (non-condensing)                                                                                                                                                                                                           |
| <b>Dimensions</b>           | 51 x 120 x 120 mm (2 x 4.7 x 4.7 in)                                                                                                                                                                                                                                               |
| <b>Weight</b>               | 675 g (1.5 lb)                                                                                                                                                                                                                                                                     |
| <b>Required hardware</b>    | AXIS TU6004-E Cable, AXIS TU6005 Plenum Cable, AXIS F21 Sensor Unit, AXIS F4105-LRE Dome Sensor, AXIS F7225-RE Pinhole Sensor                                                                                                                                                      |

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|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Included accessories</b>      | Installation guide, Windows® decoder 1-user license                                                                                                                        | <b>Languages</b> | English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese |
| <b>Optional accessories</b>      | AXIS Surveillance Cards<br>TU6001 Connector 3-pin, TU6008 Connector 5-pin, TU6009 Connector 6-pin<br>For more accessories, see <a href="https://www.axis.com">axis.com</a> | <b>Warranty</b>  | 5-year warranty, see <a href="https://www.axis.com/warranty">axis.com/warranty</a>                                                                                                           |
| <b>Video management software</b> | AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at <a href="https://www.axis.com/vms">axis.com/vms</a> |                  |                                                                                                                                                                                              |