

AXIS F9111 Main Unit

Single-channel modular unit with audio and I/O

AXIS F9111 is designed for use with a single sensor unit in discreet video surveillance applications. It delivers excellent video quality even in challenging and low light conditions. Ideal for emergency vehicles and buses, it features ignition control functionality with controlled shutdown to ensure you don't drain the vehicle's battery. Based on a divided network camera concept, it uses sensors and cables (up to 30 m/ 98 ft) from Axis with SMA-FAKRA connectors to withstand vibrations and ensure a ruggedized installation. Furthermore, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis devices on your network.

- > 1080p at 60 fps or 720p at 180 fps
- > Rugged design and connectors
- > Multiple sensor and cable options
- > Support for 2-way audio and I/O
- > Zipstream, Lightfinder, Forensic WDR



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System on chip (SoC)		Hardware: Secure boot, Axis Edge Vault with Axis device ID, secure keystore (CC EAL4+ certified hardware protection of cryptographic operations and keys)
Model	ARTPEC-7	
Memory	1024 MB RAM, 512 MB Flash	Network security IEEE 802.1X (EAP-TLS), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, IP address filtering
Compute capabilities	Machine learning processing unit (MLPU)	
Video		Documentation <i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> 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
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	1920x1080 HDTV 1080p	General
Frame rate	Up to 30 fps for 1080p (WDR mode) Up to 60 fps for 1080p Up to 180 fps for 720p	
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	Casing IP3X-rated Aluminum casing Color: black NCS S 9000-N
Image settings	Contrast, brightness, sharpness, Forensic WDR, dithered orientation aid, white balance, tone mapping, exposure control, exposure zones, compression, rotation: 0°, 90°, 180°, 270°, mirroring, polygon privacy mask, control queue	Sustainability PVC free
Audio		Power Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 10–48 V DC, typical 11 W, max 25.5 W
Audio streaming	Two-way, full duplex	Connectors RJ45 for 10BASE-T/100BASE-TX/1000BASE-T PoE 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
Audio 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	Storage Support for microSD/microSDHC/microSDXC card and encryption Recording to network-attached storage (NAS) For SD card and NAS recommendations see axis.com
Audio input/output	2x external microphone input or line input, 1x line output, ring power, digital audio input	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)
Network		Storage conditions -40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
Network protocols	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)	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, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), VCCI Class A, RCM AS/NZS CISPR 32 Class A, KC KN32 Class A, KC KN35, EAC, ECE R10 rev.05 (E-mark) 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
System integration		Dimensions 51 x 120 x 120 mm (2 x 4.7 x 4.7 in)
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	Weight 650 g (1.4 lb)
Event conditions	Device status, digital audio, edge storage, I/O, PTZ, scheduled event, video	Required hardware AXIS TU6004-E Cable, AXIS TU6005 Plenum Cable, AXIS F21 Sensor Unit, AXIS F4105-LRE Dome Sensor, AXIS F7225-RE Pinhole Sensor
Event actions	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	Included accessories Installation guide, Windows® decoder 1-user license
Data streaming	Event data	Optional accessories AXIS Surveillance Cards TU6001 Connector 3-pin, TU6008 Connector 5-pin, TU6009 Connector 6-pin For more accessories, see axis.com
Analytics		Video management software AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at axis.com/vms
AXIS Object Analytics	Object classes: humans, vehicles Trigger conditions: line crossing, object in area Up to 10 scenarios Metadata visualized with color-coded bounding boxes Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event	Languages English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese
Applications	Included AXIS Object Analytics AXIS Video Motion Detection, audio detection Supported AXIS People Counter, tampering alarm Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap	Warranty 5-year warranty, see axis.com/warranty
Cybersecurity		
Edge security	Software: Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption	