

AXIS FA51 Main Unit

Single-channel main unit with HDMI output

This modular single-channel main unit can connect to one sensor unit offering highly discreet surveillance. Featuring an HDMI output, it's possible to display live video on a public viewing monitor. And, AXIS Face Detector highlights faces within bounding boxes to let would-be shoplifters know they're being monitored and proactively reduce shoplifting. Compatible with all AXIS FA sensor units including IR sensor units, you'll enjoy excellent video quality even in complete darkness. Furthermore, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis devices on your network.

- > **HDTV 1080p at full frame rate**
- > **AXIS Face Detector preinstalled**
- > **HDMI output for public viewing monitors**
- > **1 configurable input/output port**
- > **Compatible with all AXIS FA sensor units**



AXIS FA51 Main Unit

System on chip (SoC)

Model

ARTPEC-6

Memory

1024 MB RAM, 512 MB Flash

Video

Video compression

H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles
Motion JPEG

Resolution

1920x1080 (1080p) to 160x90

WDR

Forensic WDR

Frame rate

Up to 25/30 fps in all resolutions

Video streaming

Multiple, individually configurable streams in H.264 and Motion JPEG
Axis Zipstream technology in H.264
Controllable frame rate and bandwidth
VBR/ABR/MBR H.264
HDMI

HDMI output

Single camera source
Playlist: single camera sources, still images
1080p 30/25/24 fps (50/60 Hz)
720p 50/60 fps (50/60 Hz)
576p 50 fps (50/60 Hz)
480p 60 fps (50/60 Hz)

Image settings

Contrast, brightness, sharpness, white balance, exposure control, exposure zones, compression, rotation: 0°, 90°, 180°, 270° including corridor format, mirroring, polygon privacy mask, control queue

Pan/Tilt/Zoom

Digital PTZ, preset positions

Network

Security

IP address filtering, HTTPS¹ encryption, IEEE 802.1x (EAP-TLS)¹ network access control, multi-level user, signed video, Axis Edge Vault, Axis device ID, secure keystore (CC EAL4 certified)

Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS¹, TLS¹, 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, CDP, MQTT, 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, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at onvif.org

Event conditions

Device status, edge storage, I/O, PTZ, scheduled event, video
MQTT subscribe

Event actions

Toggle I/O, send images, publish MQTT, send notifications, overlay text, recordings, SNMP trap messages, status LED, video clips
MQTT publish

Data streaming

Event data

1. 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 Motion Guard, AXIS Fence Guard, AXIS Loitering Guard

AXIS Video Motion Detection, AXIS Face Detector, active tampering alarm

Supported

AXIS People Counter, autotracking

Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap

Approvals

EMC

EN 55035, EN 55032 Class A, EN 61000-6-1, EN 61000-6-2

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

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

Environment

IEC/EN 60529 IP4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78

Network

NIST SP500-267

Cybersecurity

ETSI EN 303 645, BSI IT Security Label

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, AES-XTS-Plain64 256bit SD card encryption
Hardware: Secure boot, Axis Edge Vault with Axis device ID, signed video, secure keystore (CC EAL4+ certified hardware protection of cryptographic operations and keys)

Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)², IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS², TLS v1.2/v1.3², 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

IP4X-

Aluminum casing

Color: black NCS S 9000-N

Sustainability

PVC free, BFR/CFR free

Power

Power over Ethernet (PoE) IEEE 802.3af Type 1 Class 3, typical 5.2 W, max 6.82 W

Connectors

RJ45 10BASE-T/100BASE-TX PoE

RJ12 for sensor unit

4-pin terminal block for two configurable alarm inputs/outputs (12 V DC output, max. load 50 mA)

HDMI type D

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

-20 °C to 50 °C (-4 °F to 122 °F)

Maximum temperature (intermittent): 60 °C (140 °F)

Start-up temperature: -20 °C (-4 °F)

Humidity 10–85% RH (non-condensing)

Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)

Humidity 10–85% RH (non-condensing)

2. 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).

Dimensions

24 x 49 x 152 mm (0.9 x 1.9 x 6.0 in)

Weight

195 g (0.43 lb)

Included accessories

Installation guide, Windows® decoder 1-user license, terminal block connector

Optional accessories

AXIS T8415 Wireless Installation Tool, AXIS Surveillance Cards, AXIS T8120 Midspan 15 W 1-port
For more accessories, see [axis.com](https://www.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](https://www.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](https://www.axis.com/warranty)