

AXIS F Series

Flexible cameras that let you see more



- > Flexible, rugged, discreet design
- > Wide Dynamic Range – Forensic Capture
- > HDTV 1080p at 50/60 frames per second
- > Two-way audio
- > Input/output ports for external devices

AXIS F Series offers flexible, high-performance cameras that support wide dynamic range and HDTV 1080p for superb image detail in extremely discreet indoor, outdoor and mobile surveillance applications. They are ideal for ATMs (automated teller machines), banks, stores, hotels, as well as rugged environments such as emergency vehicles.

Based on a divided network camera concept, AXIS F Series comprises AXIS F41 Main Unit and AXIS F Sensor Units. AXIS F41 houses the processor, network, power and other connections, as well as a memory card slot. It is connected to an AXIS F Sensor Unit, which consists of a lens and image sensor with a 3-m (10-ft.) or 12-m (39-ft.) cable. The divided concept enables the small sensor unit to be installed discreetly. The long cable from the sensor unit provides the flexibility to place the main unit where there is space.

The two available sensor units are AXIS F1005-E with a 113° horizontal field of view for indoor/outdoor use, and the varifocal AXIS F1015 with a 53° to 108° horizontal viewing angle for indoor use.

AXIS F41 Main Unit supports Wide Dynamic Range – Forensic Capture, which enables details from both bright and dark areas of a scene to be visible—ideal for scenarios such as at entrances or in front of ATMs where the subject would usually be dark against a bright background. It also provides HDTV 1080p performance at up to 50/60 frames per second for capturing fast-moving objects and generating smoother video.

AXIS F41 supports audio in and out, RS232 for integration of external data to the video, four configurable input/output ports for connection to external equipment, and intelligent video applications. It can be powered by Power over Ethernet or an 8–28 V DC power supply.



Flexible HDTV cameras for discreet indoor/outdoor surveillance



AXIS F products are flexible and easy to install on or behind walls and ceilings, and in very limited spaces. AXIS F41 Main Unit and AXIS F1005-E Sensor Unit can be used in vehicles for mobile surveillance since they can withstand tough conditions such as vibrations, shocks and temperature fluctuations. The IP66- and NEMA 4X-rated AXIS F1005-E can also be installed outdoors as it withstands dust, rain, snow and ice.

Superb performance in challenging lighting conditions

Scenes with very bright and dark areas are problematic for standard cameras. For example, in backlight situations where the camera faces a bright background, such as at entrances or in front of ATMs, a typical camera would produce an image where objects in the foreground or dark areas would hardly be visible. AXIS F41 Main Unit's support for

Wide Dynamic Range (WDR) – Forensic Capture enables an extremely high level of detail to be visible in both bright and dark areas of a scene. AXIS F41 also automatically transitions to low-light mode, and together with AXIS F Sensor Units' high light sensitivity, they provide good color video in nighttime conditions.



Scene with backlight. At left, image without WDR – Forensic Capture, where only details in the bright areas are visible. At right, image with WDR – Forensic Capture, where details in both bright and dark areas are visible.

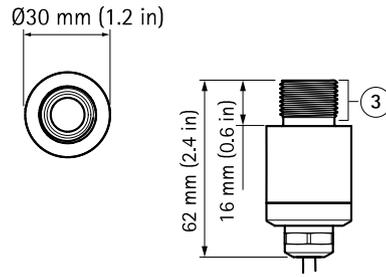


Nighttime scene. At left, image without WDR – Forensic Capture, where the bright areas are overexposed. At right, image with WDR – Forensic Capture, where details in the dark background and details in the brightly lit signage and window display are visible.

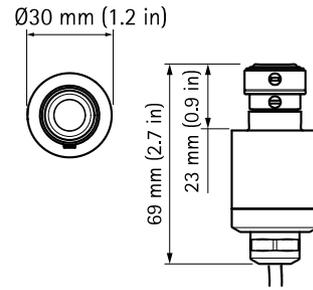
Dimensions – Sensor units

1. AXIS F1005-E Sensor Unit
2. AXIS F1015 Sensor Unit
3. Thread: M20 x 1.5

① AXIS F1005-E

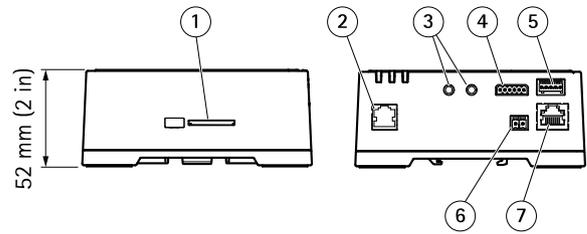
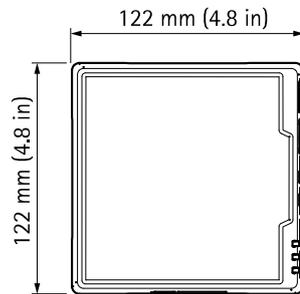


② AXIS F1015



Dimensions – Main unit

1. SD card slot
2. Camera connector
3. Audio in and out
4. I/O terminal connectors
5. RS232
6. Power connector
7. Network connector



Included accessories

1. AXIS F8201 Vari-angle Mounting Bracket for AXIS F1005-E/F1015



Optional accessories

1. AXIS F8001 Surface Mount with Strain Relief for securing AXIS F41 to a surface. Bracket withstands strong vibrations and secures all cables to/from the main unit
2. AXIS F8002 DIN Rail Clip for minimizing space used for mounting AXIS F41
3. AXIS F8203 Fixed Mount Bracket (5-pack) for sturdy mounting of AXIS F1005-E/F1015
4. AXIS F8401 Clear Lens Protector (5-pack), providing IK10 impact resistance for AXIS F1005-E
5. AXIS T8120 15 W Midspan 1-Port
6. AXIS P7701 Video Decoder



Technical Specifications - AXIS F Series

Models	Main unit: AXIS F41: 1 channel, HDTV 1080p, WDR – Forensic Capture Sensor units with option of 3 m or 12 m (10 ft or 39 ft) cable: AXIS F1005-E: Standard, IP66-rated AXIS F1015: Varifocal (Main and sensor units sold separately)
Camera	
Image sensor	1/2.8" (effective) progressive scan RGB CMOS
Lens	Fixed iris AXIS F1005-E: 2.8 mm: 113° view ^a , F2.0 AXIS F1015: 3–6 mm: 108° to 53° view ^a , F2.0
Minimum illumination	Color: 0.3 lux
Shutter time	HDTV 1080p 25/30/50/60 fps: 1/143000 s to 2 s WUXGA (1920x1200) 25/30 fps: 1/143000 s to 2 s
Video	
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolutions	1920x1200 to 160x90
Frame rate	H.264/Motion JPEG: 50/60 fps (50/60 Hz) in all resolutions without WDR; 25/30 fps (50/60 Hz) in all resolutions with WDR
Video streaming	Multiple, individually configurable streams in H.264 (Main, Baseline and High Profiles) and Motion JPEG Controllable frame rate and bandwidth VBR/MBR H.264
Image settings	Wide Dynamic Range – Forensic Capture: up to 120 dB depending on scene Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control, Exposure zones, Local contrast, Rotation, Axis' Corridor Format, Text and image overlay, Privacy mask, Mirroring of images
Audio	
Audio streaming	Two-way
Audio compression	AAC 8/16/32 kHz, 8–128 kbit/s AAC LC 8/16/32 kHz, 8–128 kbit/s G.711 PCM 8 kHz 64 kbit/s G.726 ADPCM 8 kHz 24 kbit/s or 32 kbit/s Configurable bit rate
Audio input/output	External microphone input or line input, Line output
Network	
Security	Password protection, IP address filtering, HTTPS ^b encryption, IEEE 802.1X ^b network access control, Digest authentication, User access log, Centralized certificate management
Supported protocols	IPv4/v6, HTTP, HTTPS ^b , SSL/TLS ^b , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP [™] , SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH
System integration	
Application Programming Interface	Open API for software integration, including VAPIX [®] and AXIS Camera Application Platform; specifications at www.axis.com AXIS Video Hosting System (AVHS) with One-Click Camera Connection ONVIF Profile S; specification at www.onvif.org
Intelligent video	Video motion detection, Active tampering alarm, Audio detection, AXIS Camera Application Platform enabling installation of additional applications
Event triggers	Intelligent video, External inputs, Edge storage events
Event actions	File upload: FTP, HTTP, network share and email Notification: email, HTTP and TCP External output activation Pre- and post-alarm video buffering Video and audio recording to edge storage Play audio clip WDR mode
Built-in installation aids	Pixel counter
Data streaming	Event data

General	
Casing	Main/sensor units: aluminum
Memory	512 MB RAM, 256 MB Flash
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 (max 7.7 W) 8–28 V DC max 7.8 W
Connectors	Female RJ45 for 10BASE-T/100BASE-TX PoE RJ12 for the sensor units 6-pin terminal block for four configurable inputs/outputs (12 V DC output), max. load 50 mA) 3.5 mm mic/line in, 3.5 mm line out 5-pin terminal block RS232 2-pin terminal block for 8–28 V DC input
Edge storage	One SD/SDHC/SDXC slot supporting memory card up to 64 GB (card not included) Support for recording to dedicated network-attached storage (NAS)
Operating conditions	AXIS F41: -30 °C to 60 °C (-22 °F to 140 °F) AXIS F1005-E/F1015: -30 °C to 55 °C (-22 °F to 131 °F) AXIS F1005-E: Humidity 10–100% RH (condensing) AXIS F41, AXIS F1015: Humidity 10–85% RH (non-condensing)
Approvals	ECE R10 rev.04 (E approval), EN 50121-4, IEC/EN/UL 60950-1, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC 60068-2-30, IEC 60068-2-78, IEC 60529 IP4X, EN 55022 Class B, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class B, ICES-003 Class B, VCCI Class B, C-tick AS/NZS CISPR 22 Class B, KCC KN22 Class B, KN24, EN 50581 AXIS F41: EN 50155 (vibration, shock, bump), EN 50581, IEC 60068-2-60, IEC 60721-3-5 5M3 (vibration, shock), IEC 62236-4 AXIS F1005-E: EN 50155 (vibration, shock, bump), IEC 60068-2-60, IEC 60529 IP66, IEC 60721-3-5 5M3 (vibration, shock), IEC/EN/UL 60950-22, NEMA 250 Type 4X AXIS F1015: IEC 60068-2-6, IEC 60068-2-27
Weight	Main unit: AXIS F41: 520 g (1.15 lb) Sensor units: AXIS F1005-E (12 m / 39 ft cable): 366 g (0.8 lb) AXIS F1005-E (3 m / 10 ft cable): 116 g (0.2 lb) AXIS F1015 (12 m / 39 ft cable): 370 g (0.8 lb) AXIS F1015 (3 m / 10 ft cable): 120 g (0.2 lb)
Included accessories	Installation Guide AXIS F41: Installation and Management Software CD, Windows decoder 1-user license, AVHS Authentication key AXIS F1005-E/F1015: AXIS F8201 Vari-angle Mounting Bracket
Video management software	AXIS Camera Companion (included), AXIS Camera Station and video management software from Axis' Application Development Partners (not included). For more information, see www.axis.com/products/video/software
Warranty	Axis 3-year warranty and AXIS Extended Warranty option, see www.axis.com/warranty

a. Horizontal angle of view

b. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>), and cryptographic software written by Eric Young (ey@cryptsoft.com).

More information is available at www.axis.com