

F101-A XF P1377 Explosion-Protected Camera

Excellent image quality for hazardous areas

Certified (NEC, ATEX, IECEx) for use in potentially combustible environments, the lightweight camera offers high quality, high resolution images of objects and people. Featuring Axis Lightfinder and Axis Forensic WDR, it delivers true colors and great details in challenging light or near darkness. It includes electronic image stabilization for stable images despite vibration. And, intelligent i-CS lens technology facilitates fast and easy installation with remote zoom. Enhanced security features such as signed firmware and secure boot ensure the integrity and authenticity of the firmware. Furthermore, Axis Zipstream with support for H.264/H.265 significantly lowers bandwidth and storage requirements.

- > 30 fps in 5 MP or up to 180 fps in HDTV 720p
- > Lightfinder and Forensic WDR
- > Zipstream supporting H.264 and H.265
- > Signed firmware and secure boot
- > NEC, ATEX and IECEx



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Camera	
Image sensor	1/2.7" progressive scan RGB CMOS
Lens	Varifocal 3.9–10 mm, F1.5 4:3 aspect ratio: Horizontal field of view: 75°–31° Vertical field of view: 55°–23° 16:9 aspect ratio: Horizontal field of view: 75°–31° Vertical field of view: 41°–17° Remote zoom, remote focus
Day and night	Automatically removable infrared-cut filter
Minimum illumination	5 MP 25/30 fps with Forensic WDR and Lightfinder: Color: 0.15 lux, at 50 IRE F1.5 B/W: 0.03 lux, at 50 IRE F1.5
Shutter speed	WDR: 1/33500 s to 1/5 s No WDR: 1/5000 s to 1/5 s
System on chip (SoC)	
Model	ARTPEC-7
Memory	1 GB 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) Motion JPEG
Resolution	2592x1944 (5 MP) to 160x90 2688x1512 (4 MP) to 160x90 1280x720 (HDTV 720p) to 160x90
Frame rate	Capture mode 5 MP: 25/30 fps (50/60 Hz) Capture mode 4 MP: 25/30 fps (50/60 Hz) Capture mode HDTV 720p: 180 fps
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 Video streaming indicator
Multi-view streaming	Up to 8 individually cropped out view areas
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: Up to 120 dB depending on scene, white balance, day/night threshold, exposure mode, exposure zones, local contrast, tone mapping, compression, rotation: auto, 0°, 90°, 180°, 270° including Corridor Format, mirroring of images, dynamic text and image overlay, privacy masks, defogging, electronic image stabilization, barrel distortion correction, scene profiles: forensic, vivid, traffic overview
Pan/Tilt/Zoom	Digital PTZ Uploadable PTZ driver (Pelco D pre-installed)
Audio	
Audio streaming	Two-way, full duplex
Audio encoding	AAC LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz, LPCM 48 kHz Configurable bit rate
Audio input/output	External microphone input, line input, digital input with ring power, line output, built-in microphone (can be disabled)
Network	
Security	IP address filtering, HTTPS ^a encryption, IEEE 802.1X (EAP-TLS) ^a network access control, user access log, centralized certificate management
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS ^a , HTTP/2, TLS ^a , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, SFTP, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDp, CDP, MQTT v3.1.1, Syslog, 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 S, and ONVIF® Profile T, specification at onvif.org
Onscreen controls	Electronic image stabilization Day/night shift Defogging Wide dynamic range
Event conditions	Analytics, shock detection, edge storage events, supervised external input, audio level, time scheduled, MQTT subscribe
Event actions	Record video: SD card and network share Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email Pre- and post-alarm video or image buffering for recording or upload Notification: email, HTTP, HTTPS, TCP and SNMP trap PTZ: PTZ preset, start/stop guard tour Overlay text, external output activation, play audio clip, WDR mode, day/night mode MQTT publish
Data streaming	Event data
Built-in installation aids	Focus assistant, pixel counter, remote back focus, autorotation
Analytics	
Applications	Included AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, active tampering alarm, gatekeeper Supported AXIS Live Privacy Shield, AXIS Perimeter Defender Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap
Cybersecurity	
Edge security	Software: Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption Hardware: Secure boot
Network security	IEEE 802.1X (EAP-TLS) ^a , HTTPS/HSTS ^a , TLS v1.2/v1.3 ^a , Network Time Security (NTS), X.509 Certificate PKI, IP address filtering
Documentation	<i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> To download documents, go to axis.com/support/cybersecurity/resources To read more about Axis cybersecurity support, go to axis.com/cybersecurity
General	
Casing	IP66-rated, powdercoated aluminum chassis Casing manufactured and certified by Spectrum Camera Solutions, LLC
Sustainability	PVC free Free of hazardous brominated and chlorinated flame retardants (BFR/CFR free)
Power	Camera: Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3, max 10.7 W, typical 5.4 W Heater: 12–24 V DC, max 25 W 12–24 V DC is required for operating at temperatures below 0 °C (32 °F).
Connectors	2 x 3/4" NPT cable entries RJ45 10BASE-T/100BASE-TX PoE 2-pin terminal block connector for heater I/O: 4-pin 2.5 mm terminal block for two configurable inputs/outputs (12 V DC output, max. load 50 mA) 3.5 mm mic/line in, 3.5 mm line out
Storage	Pre-installed AXIS Surveillance microSDXC Card 128 GB Support for SD card encryption (AES-XTS-Plain64 256bit) Recording to network-attached storage (NAS) For SD card and NAS recommendations see axis.com

Operating conditions	-50 °C to 60 °C (-58 °F to 140 °F) US Class/Division system: -40 °C to 60 °C (-40 °F to 140 °F) Humidity 10-100% RH (condensing)	Certificate: FM18ATEX0073X IECEX: Ex db IIB+H2 T5 Gb Ta = -50°C to 55°C, IP66 Ex tb IIIC T85°C Db Ta = -50°C to 55°C, IP66 Certificate: IECEX FMG 18.0029X INMETRO: Ex db IIB+H2 T5 Gb Ex tb IIIC T85°C Db IP66 Ta = -50°C to 55°C Certificate: NCC 20.0084 X
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (non-condensing)	
Approvals	EMC EN 55035, EN 61000-6-1, EN 61000-6-2, EN 55032 Class A, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), VCCI Class A, RCM AS/NZS CISPR 32 Class A Safety EN 62368-1 Environment ANSI/NEMA 250 4X, ANSI/IEC/EN 60529 IP66, GOST 14254 IP66 Network NIST SP500-267 Explosion FM Class 3600:2018, FM Class 3615:2018, FM Class 3616:2011, ANSI/ISA/EN/ABNT NBR/IEC/CAN-CSAC22.2 60079-0, ANSI/ISA/EN/ABNT NBR/IEC/CAN-CSAC22.2 60079-1, ANSI/ISA/EN/ABNT NBR/IEC/CAN-CSAC22.2 60079-31, TP TC 012, GOST 31610.0, GOST IEC 60079-1, GOST IEC 60079-31	
Certifications	USA: Class I Division 1 Groups BCD T5 Ta= -40°C to 55°C, Type 4X, IP66 Class II/III Division 1 Groups EFG Ta= -40°C to 55°C, Type 4X, IP66 Certificate: FM18US0262X Canada: Class I Division 1 Groups BCD T5 Ta= -50°C to 55°C, Type 4X, IP66 Class II/III Division 1 Groups EFG Ta= -50°C to 55°C, Type 4X, IP66 Class I, Zone 1, AEx/Ex db IIB+H2 T5 Gb Ta = -50°C to 55°C, Type 4X, IP66 Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -50°C to 55°C, Type 4X, IP66 Certificate: FM18CA0126X ATEX: II 2 G Ex db IIB+H2 T5 Gb Ta = -50°C to 55°C, IP66 II 2 D Ex tb IIIC T85°C Db Ta = -50°C to 55°C, IP66	Dimensions 13.85 x 7.20 x 5.97 in (352 x 183 x 152 mm) Weight 14 lb (6.2 kg) Included accessories Installation Guide, Windows® decoder 1-user license, AXIS Surveillance microSDXC Card 128 GB, 3/4" NPT to M20x1.5 thread adapter Optional accessories EXTB-3 Junction Box ExCam, Non-armored cables ExCam, 10, 25, 95 m (33, 82, 312 ft), Armored cables ExCam, 10, 25, 95 m (33, 82, 312 ft), Ex Connection Rail 4-port PoE PS 24, Ex Connection Rail 8-port PoE PS 24 For more accessories, see axis.com Video management software AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at axis.com/vms Languages English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Polish Warranty 5-year warranty, see axis.com/warranty a. 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).

Environmental responsibility:

axis.com/environmental-responsibility