

Spectrum F101-Q1615MKIII-BD

Explosion-Proof Fixed Camera with Deep Learning

Key Features

- Powerful AI with deep learning
- Granular object classification
- Support for 3rd party AI applications
- Edge-based processing for scalability
- Front Glass Protective Film (F1XX-TO) included
- Reliable Securing Kit included
- Made in USA
- NDAA-Compliant
- cFMus, Class I/II/III, Division 1, Zone 1/21, IECEx, ATEX, UKCA approved, INMETRO
- Operating Temperature:
 - Zone System: -50°C to +60°C
 - (USA) Class/Division System: -40°C to +60°C
- F1XX-TO & SF-RSK Included

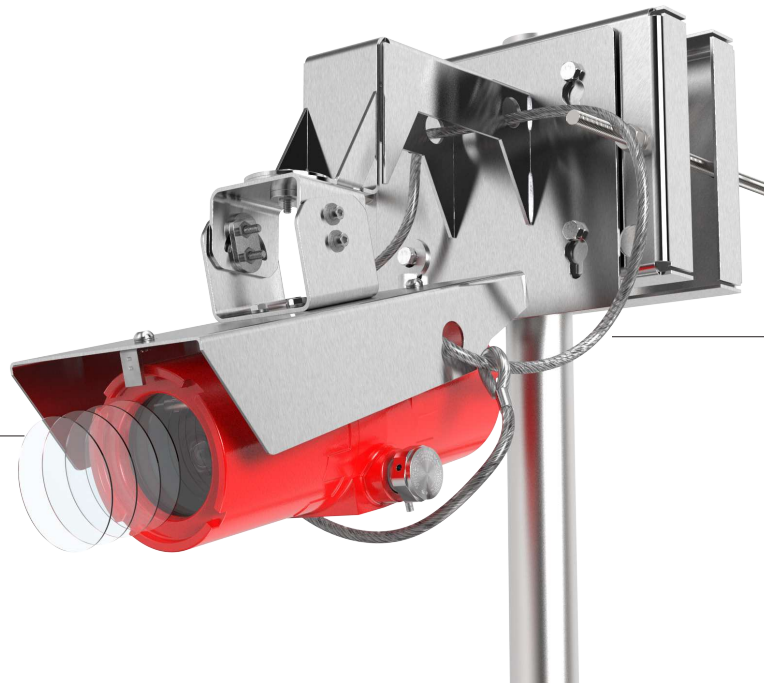


Axis Camera Inside



Description

Spectrum F101-Q1615MKIII-BD explosion-proof network camera combines exceptional imaging and video performance with outstanding hardware and processing capabilities to provide the perfect platform for analytics based on artificial intelligence (AI) with deep learning. Enclosed in a red aluminum explosion-proof housing, it's certified (cFMus, ATEX, IECEx, UKCA approved and INMETRO) for use in potentially combustible environments. This camera also features an innovative dual chipset that is the basis for nuanced and remarkably granular object classification. Furthermore, the dual chipset also makes it possible for preinstalled Axis object analytics to distinguish between bikes, cars, buses, trucks, and so on.



F1XX-TO

Front Glass Protective Film
4-Layer peel off design

SF-RSK
Reliable Securing Kit

Specifications

Spectrum F101-Q1615MKIII-BD

Camera		Network	
Image sensor	1/2.8" Progressive scan RGB CMOS	Security	Password protection, IP address filtering, HTTPSa encryption, IEEE 802.1x (EAP-TLS)a network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot, secure keystore (CC EAL4 certified), TPM (FIPS 140-2 certified)
Lens	Varifocal, IR corrected, CS-mount 2 MP (16:9): 2.8–8.5 mm, F1.2 Horizontal field of view: 116°–40° Vertical field of view: 61°–22° i-CS lens	Supported protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPSa, TLSa, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP, SNMPv1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, RTSP, RTP, SFTP, SRTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, LLDP, CDP, MQTT v3.1.1, Syslog, Link-Local address (ZeroConf)
Day and night	Automatically removable infrared-cut filter	System integration	
Minimum illumination	HDTV 1080p 25/30 fps with Forensic WDR and Lightfinder: Color: 0.05 lux, B/W: 0.01 lux at 50 IRE, F1.2 HDTV 1080p 50/60 fps with Forensic WDR and Lightfinder: Color: 0.1 lux, B/W: 0.02 lux at 50 IRE, F1.2 HDTV 1080p 100/120 fps: Color: 0.2 lux, B/W: 0.04 lux at 50 IRE, F1.2	Application programming interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at axis.com AXIS Guardian with One-Click Connection One-Click Cloud Connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specifications at onvif.org
Shutter speed	1/125000 to 2 s	Onscreen controls	Electronic image stabilization Day/night shift Defogging Wide dynamic range Video streaming indicator
Sensor	Axis Q1615 Mk III	Event conditions	Analytics, external input, supervised external input, edge storage events, virtual inputs through API Audio: audio detection Device status: above operating temperature, above or below operating temperature, below operating temperature, IP address removed, network lost, new IP address, shock detection, ring power overcurrent protection, storage failure, system ready, within operating temperature Edge storage: recording ongoing, storage disruption I/O: digital input, manual trigger, virtual input MQTT subscribe PTZ: PTZ malfunctioning, PTZ movement, PTZ preset position reached, PTZ ready Scheduled and recurring: scheduled event Video: live stream open
System on chip (SoC)		Event actions	MQTT publish 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, zoom preset, defog mode, PTZ control
Model	ARTPEC-7	Data streaming	Event data
Memory	2048 MB RAM, 1024 MB Flash	Built-in installation aids	Focus assistant, pixel counter, leveling assistant, camera orientation aid, traffic wizard i-CS: Remote zoom and focus Other lens: Remote back focus
Compute capabilities	Deep learning processing unit (DLPU)		
Video			
Video compression	H.264 (MPEG-4 Part 10/AVC), Main, Baseline and High Profile H.265 (MPEG-H Part 2/HEVC) Main Profile Motion JPEG		
Resolution	HDTV 1080p 100/120 fps (no WDR): 1920x1080 to 160x90 HDTV 1080p 50/60 fps (WDR):1920x1080 to 160x90 HDTV 1080p 25/30 fps (WDR): 1920x1080 to 160x90		
Frame rate	Up to 100/120 fps (50/60 Hz) in 1080p (no WDR)		
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		
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: Up to 120 dB depending on scene, white balance, day/night threshold, tone mapping, local contrast, exposure mode, exposure zones, defogging, electronic image stabilization, barrel distortion correction, compression, rotation: auto, 0°, 90°, 180°, 270° including Corridor Format, dynamic text and image overlay, polygon privacy mask, mirroring of images 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	24bit LPCM, AAC-LC 8/16/32/44.1/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate		
Audio input/output	External microphone input, line input, digital input with ring power, built-in microphone (can be disabled), balanced microphone, balanced input, automatic gain control, line output 24 bit AD/DA-conversion		

Specifications (continued)

Analytics			
Axis Object Analytics	Object classes: humans, vehicles (types: cars, buses, trucks, bikes) 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		
Applications	Included AXIS Object Analytics AXIS Video Motion Detection, active tampering alarm, audio detection Support for additional applications if the device is used with compatible accessories. For more information, contact your Axis partner. Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap		
General			
Casing	Aluminum		
Weight	6.4 kg (14 lb)		
Dimensions	13.85 x 7.20 x 6.01 in (352 x 183 x 153 mm)		
Power	Power over Ethernet IEEE 802.3at Type 2 Class 4, max. 25.5 W, typical 13.7 W Heater: 12–24 VAC/VDC 20W		
Storage Conditions	-40°C to 65°C (-40°F to 149°F) Humidity 5–95% RH (non-condensing)		
Operating Conditions	Zone system: -50°C to +60°C (USA) Class/Division system: -40°C to +60°C Humidity 10–100% RH (condensing)		
Warranty	5-year limited warranty, see spectrumcamera.com/warranty		
Approvals	Hazardous Area FM3600, FM3615, ANSI/ISA/EN/IEC/CAN/CSA-C22.2 60079-0, ANSI/UL/EN/IEC/CAN/CSA-C22.2 60079-1, ANSI/UL/IEC/EC/CAN/CSA-C22.2 60079-31 EMC EN 60032 Class A, EN 50121-4, IEC 62236-4, EN 60024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A, KC KN32 Class A, KC KN35 Safety IEC/EN/UL 60950-22, IEC/EN/UL 62368-1, IS 13252 Environment IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9) Network NIST SP500-267		
		Explosion-proof Certifications	USA: Class I Division 1 Groups BCD T6 Ta= -40°C to +60°C, Type 4X, IP66 Class II/III Division 1 Groups EFG Ta= -40°C to +60°C, Type 4X, IP66 Certificate: FM18US0262X Canada: Class I Division 1 Groups BCD T6 Ta= -50°C to +60°C, Type 4X, IP66 Class II/III Division 1 Groups EFG Ta= -50°C to +60°C, Type 4X, IP66 Class I, Zone 1, AEx/Ex db IIB+H2 T5 Gb Ta = -50°C to +60, Type 4X, IP66 Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -50°C to +60°C, Type 4X, IP66 Certificate: FM18CA0126X ATEX: II 2 G Ex db IIB+H2 T5 Gb Ta = -50°C to +60°C, IP66 II 2 D Ex tb IIIC T85°C Db Ta = -50°C to +60°C, IP66 Certificate: FM18ATEX0073X IECEx: Ex db IIB+H2 T5 Gb Ta = -50°C to +60°C, IP66 Ex tb IIIC T85°C Db Ta = -50°C to +60°C, IP66 Certificate: IECEx FMG 18.0029X
		Video Management Software	AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at axis.com/vms
		Languages (Camera)	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese



SPECTRUM
CAMERA SOLUTIONS





FM
US



CE

MADE IN USA

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA

SERIAL:

CERT NO.
FM18IU50262X & FM18CA0126X

MODEL: F101-Q1615MKIII-BD

INPUT: 57VDC, 8.2 W

HEATER: 12-24VDC/VAC, 25 W

UK
CA

1725



US: Class I, Division 1 Groups BCD T6 Ta = -40°C to +60°C, Type 4X, IP66
 Class II/III Division 1 Groups EFG T6 Ta = -40°C to +60°C, Type 4X, IP66
 Canada: Class I Division 1 Groups BCD T6 Ta = -50°C to +60°C, Type 4X, IP66
 Class II/III Division 1 Groups EFG T6 Ta = -50°C to +60°C, Type 4X, IP66
 Zone 1, Zone 1, AEx/Ex/Ex II B/IB+H2 SEE TABLE FOR EX CODE T6 Ta = -50°C to +60°C, Type 4X, IP66
 Zone 21, AEx/Ex/Ex II C T85°C D/Db Ta = -50°C to +60°C, Type 4X, IP66
 N I 2 G Ex/Ex II B/IB+H2 SEE TABLE FOR EX CODE T6 Ta = -50°C to +60°C, IP66
 N I 2 D Ex/Ex II C T85°C D/Db Ta = -50°C to +60°C, IP66

CERT NO. FM18ATEX00037X, ICEA FMG 18.0029X, FM2UZE000101X

WARNING: DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT. Install seal within 18 inches. For Zones, install seal after opening – **POTENTIAL ELECTRICAL EXPLOSION HAZARD – SEE INSTRUCTION.** Use 80°C OR HIGHER RATED CONDUCTORS.

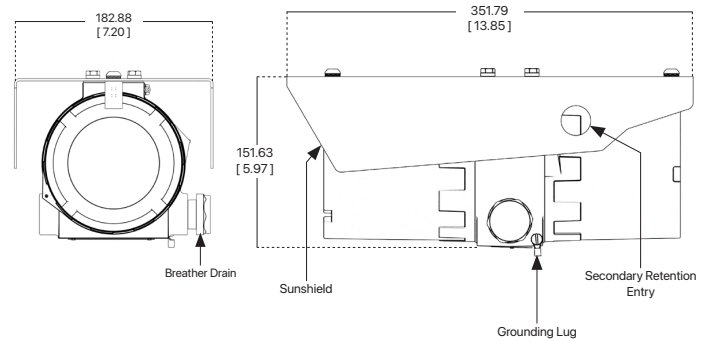
AVERTISSEMENT: NE PAS OUVRIER LORSQUE ENERGISE OU QUAND UNE ATMOSPHERE EXPLOSIVE POURRA ETRE PRESENTE. Les joints de fermeture sont obligatoires dans une distance de 18 pouces. Pour les zones, installez un scellé à l'intérieur. **AVERTISSEMENT – RISQUE DE CHARGE ELECTROSTATIQUE POTENTIEL – VOIR LES INSTRUCTIONS.** UTILISEZ DES CONDUCTEURS COTES DE 80 °C OU PLUS.



TYPE	CONFIGURATION
TS	WITH HEATER/BOILER
TS	WITH/OUT HEATER/BOILER









SPECTRUM
CAMERA SOLUTIONS

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY
8935 ALAMEDA GLENDA RD. HOUSTON, TEXAS 77075 USA

No. DE SÉRIE: NCC 20.0084 X

FABRICADO NO EUA

CERT NO. NCC 20.0084 X

MODELO: F101-P1615MKII-BD

ALIMENTAÇÃO: 57 VDC 8.2W;

AQUECEDOR: 12-24 VAC/VDC 25W



INMETRO INSP 0034

Ex db IIIIB T5 Ta -20°C to +55°C, IP66
Ex db IIIC T85°C Db Ta -20°C to +55°C, IP66

NCC 20.0084 X

NCC 20.0084 X

Ex db IIIB+H2 T5 Gb Ta = -50°C to +55°C, IP66

Ex tb IIIC T85°C Db Ta = -50°C to +55°C, IP66



ATENÇÃO - NÃO ABRA ENQUANTO ENERGIZADO OU QUANDO A ATMOSFERA EXPLOSIVA PUDER ESTAR PRESENTE. INSTALAR O ANEL DE VEDAÇÃO DA ENTRADA. ATENÇÃO - RISCO POTENCIAL DE CARGAS ELETROSTÁTICAS - VER INSTRUÇÕES. USAR CONDUTORES ADEQUADOS PARA TEMPERATURAS ATÉ 80°C. ATENÇÃO - NÃO ABRIR QUANDO ENERGIZADO. ATENÇÃO - RISCO POTENCIAL DE CARGA ELETROSTÁTICA - VER INSTRUÇÕES