

Spectrum D101-X-Q3819-BD

Explosion-Proof Panoramic Camera

Key Features

- 180° horizontal, 38° vertical coverage
- 14MP multi-sensor with seamless stitching
- Built-in motors for remote pan/tilt/roll
- Axis Object Analytics
- Axis Edge Vault and TPM module
- Reliable Securing Kit included
- Made in USA
- NDAA-Compliant
- cFMus, Class I/II/III, Division 1, Zone 1/21, IECEx, ATEX, INMETRO, and UKCA approved.
- Operating Temperature: -20°C to +50°C



Axis Camera Inside



Description

Spectrum D101-X-Q3819-BD delivers an expansive 180° panoramic overview. Enclosed in a patented stainless-steel or red aluminum explosion-proof housing, it's certified (cFMus, ATEX, IECEx, INMETRO, and UKCA approved) for use in potentially combustible environments. The explosion-proof camera provides a seamless image across all four sensors with 180° horizontal, and 38° vertical coverage and 14MP resolution. Additionally you can achieve a 360° overview by mounting two cameras back-to-back with a SD-UM-SS Universal Mount. Furthermore, the camera features built-in motors that allow for remote pan/tilt/roll functionality.



Specifications

Spectrum D101-X-Q3819-BD

Camera	
Image sensor	4 x 5 MP 1/2.5" progressive scan RGB CMOS
Lens	Fixed 5.9 mm, F1.88 Horizontal field of view: 180° Vertical field of view: 38°
Day and night	Automatically removable infrared-cut filter
Minimum illumination	With Forensic WDR and Lightfinder: Color: 0.16 lux, F2.0 B/W: 0.06 lux, F2.0
Shutter speed	1/40000 to 1/25 s
Camera angle adjustment	Pan ± 135° Tilt 15° to 92° Roll ± 8°
Sensor	Axis Q3819-PVE
System on chip (SoC)	
Model	ARTPEC-7 (x2)
Memory	2048 MB RAM, 512 MB Flash
Compute Capabilities	Machine learning processing unit (MLPU)
Video	
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	8192x1728 (14.2 MP) to 608x128
Frame rate	14.2 MP @ 25/30 fps (50/60 Hz) WDR
Video streaming	One configurable stream in H.264, H.265 and Motion JPEG in full frame rate Multiple individually configurable streams in reduced frame rate Controllable frame rate and bandwidth VBR/ABR/MBR H.264/H.265
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: up to 120 dB depending on scene, white balance, day/night threshold, exposure mode, compression, dynamic text and image overlay, orientation aid, exposure control, noise reduction, fine tuning of behavior at low light, polygon privacy masks
Audio	
Audio streaming	Two-way audio via edge-to-edge technology
Audio input/output	External microphone input, ring-power, digital audio input, automatic gain control, network speaker pairing
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, 44.1 kHz ACC-LC, LPCM Configurable bit rate
Network	
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, Axis Edge Vault, Axis device ID, secure keystore (CC EAL4 certified), TPM (FIPS 140-2 certified)
Supported protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPSa, TLSa, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, LLDP, CDP, MQTT, Syslog, Link-Local address (ZeroConf)
System integration	
Application programming interface	Open API for software integration ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specification at onvif.org
Event conditions	Analytics, external input, supervised external input, edge storage events, virtual inputs through API Audio: audio detection Digital audio: digital signal contains Axis metadata, digital signal as invalid sample rate, digital signal missing, digital signal ok Device status: above operating temperature, above or below operating temperature, below operating temperature, fan failure, IP address removed, network lost, new IP address, shock detected, storage failure, system ready, within operating temperature, casing open, ring power overcurrent protection Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: digital input, manual trigger, virtual input MQTT subscribe Scheduled and recurring: scheduled event Video: live stream open, average bitrate degradation, day-night mode, tampering
Event actions	Day/night mode, overlay text, video recording to edge storage, pre- and post-alarm video buffering, send SNMP trap, play audio clip I/O events, status LED events File upload: FTP, SFTP, HTTP, HTTPS network share, email MQTT publish Notification: email, HTTP, HTTPS TCP
Data streaming	Event data
Built-in installation aids	Remote Pan/tilt/roll: designed to withstand at least 200 full cycles, autoroll, pixel counter, leveling guide
Analytics	
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
Applications	Included AXIS Object Analytics AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, active tampering alarm, audio detection Supported Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap
General	

Specifications (continued)

Casing (x)	A = Aluminum S = Stainless Steel
Weight	A = 19 lbs (8.61 kg) S = 27 lbs (8.6 kg)
Dimensions	Height: 11.5 in (292 mm) ø 8.6 in (218 mm)
Power	44-57 Vdc 18W MAX
Storage Conditions	-40°C to +65°C Humidity 5-95% RH (non-condensing)
Operating Conditions	-20°C to +50°C Humidity 10-100% RH (condensing)
Warranty	5-year limited warranty, see www.spectrumcamera.com/warranty
Approvals	<p>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/EN/IEC/CAN/ CSA-C22.2 60079-31</p> <p>EMC EN 55032 Class A, EN 50121-4, IEC 62236-4, EN 55024, 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</p> <p>Safety IEC/EN/UL 60950-22, IEC/EN/UL 62368-1, IS 13252</p> <p>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)</p> <p>Network NIST SP500-267</p>
Explosion-proof Certifications	<p>USA (Divisions): Class I Division 1 Groups B,C,D T6, type 4X, IP66/67 Class II/III, Division 1, Groups E,F,G T6 Ta = -20°C to +50°C Certificate: FM17US0156X</p> <p>USA and Canada (Zones): Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta -20°C to +50°C, Type 4X, IP66/67 Zone 21, AEx/Ex tb IIIC T85 °C Db Ta = -20°C to +50°C, Type 4X, IP66/67 Certificate: FM17US0156X and FM18CA0103X</p> <p>ATEX: II 2 G Ex db IIB+H2 T6 Gb Ta = -20°C to +50°C, IP66/67 II 2 D Ex tb IIIC T85 °C Db Ta = -20°C to +50°C, IP66/67 Certificate: FM18ATEX0057X</p> <p>IECEX: Ex db IIB+H2 T6 Gb Ta = -20°C to +50°C, IP66/67 Ex tb IIIC T85 °C Db Ta = -20°C to +50°C, IP66/67 Certificate: FMG 18.0020X</p> <p>INMETRO: Ex db IIB+H2 T6 Gb Ta = -20°C to +50°C, IP66/67 Ex tb IIIC Db T85 °C Ta = -20°C to +50°C, IP66/67 Certificate number: NCC 20.0083 X</p>
Languages (Camera)	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese

Approvals & Dimensions

FM APPROVED

SPECTRUM CAMERA SOLUTIONS
SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

8935 ALMEDA GENOA RD.
HOUSTON, TEXAS 77075
USA

CERT NO. FM17US0156X
INPUT: 44-57 Vdc 22.5W
MODEL NUMBER: D101-A-Q3819-BD SERIAL: TIME-MO-DY-YEAR
Class I Division 1 Groups B,C,D T6, Type 4X, IP66
Class II/III, Division 1, Groups E,F,G T6

-WARNINGS: Ta = -20°C to +50°C
-NOT INCLUDING KETONE OR ESTER ATMOSPHERES
-CONDUIT ENTRIES ARE M20 X 1.5
-DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
-INSTALL SEAL AT ENCLOSURE ENTRY

US Patent 9917428
US Patent D858611

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

FM APPROVED

MADE IN USA
CERT NO. FM17US0156X
FM18CA0103X

CE UK CA

MODEL: D101-A-Q3819-BD SERIAL:
INPUT: 44-57 Vdc 22.5W
Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta = -20°C to +50°C, Type 4X, IP66
Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -20°C to +50°C, Type 4X, IP66

II 2 G Ex db IIB+H2 T6 Gb Ta = -20°C to +50°C, IP66
II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +50°C, IP66

CERT NO. FM18ATEX0057X, IECEx FMG 18.0020X, FM22UKEX0028X

WARNING: DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
INSTALL SEAL AT ENCLOSURE ENTRY

US Patent 9917428
US Patent D858611
www.spectrumcamera.com

SPECTRUM CAMERA SOLUTIONS
SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA
No. **SERIE:** TIME-DY-MN-YEAR

FABRICADO NO EUA
CERT NO. NCC 20.0083 X
MODELO: D101-X-Q3819-BD
ALIMENTAÇÃO: 57Vdc 22.5W

Segurança
NCC 20.0083 X
Ex db IIB+H2 T6 Gb Ta = -20°C to +50°C
Ex tb IIIC T85°C Db Ta = -20°C to +50°C
IP66

ATENÇÃO:
- ENTRADAS DE CABOS M20 X 1.5
- NÃO ABRA ENQUANTO UMA ATMOSFERA EXPLOSIVA PUDE ESTAR PRESENTE
- INSTALAR ANEL DE VEDAÇÃO NAS ENTRADAS
- NÃO ABRIR QUANDO ENERGIZADO
- RISCO POTENCIAL DE CARGA ELETROSTÁTICA - VER INSTRUÇÕES

Patente EUA 9917428
Patente EUA D858611

