

Spectrum D401-X-Q3839-BD

Explosion-Proof 8K Multi-Sensor Panoramic Camera

Key Features

- 8K multi-sensor camera with one IP address
- 180° horizontal, 90° vertical coverage
- AI-powered with support for advanced analytics
- Horizon straightening and lossless zoom
- Built-in cybersecurity with Axis Edge Vault
- Made in USA
- NDAA-Compliant
- cFMus, Class I/II/III, Division 1, Zone 1/21
- IECEx, ATEX, INMETRO, UKCA and PESO approved.
- Operating Temperature: -20°C to +50°C (-4°F to +122°F)
- 5-Year Warranty with Registration



Description

With 29 MP at 30 fps and seamless stitching of all four images, the Spectrum D401-X-Q3938-BD AI-based Explosion-Proof camera delivers cohesive 180° panoramic overviews for complete situational awareness. Lossless zoom lets you zoom in without degrading image sharpness. Plus, remote pan/tilt/roll functionality ensures fast, cost-efficient installation.

Built on a dual Axis system-on-chip, it includes a deep learning processing unit to run advanced features and powerful analytics on the edge. For instance, AXIS Object Analytics can detect, classify, track, and count humans and types of vehicles. Furthermore, Axis Edge Vault safeguards the device and offers FIPS 140-2 Level 2 certified key storage and operations.

Specifications

Spectrum D401-X-Q3839-BD

Camera		Network	
Image sensor	4 x 8.3MP 1/1.8" progressive scan RGB CMOS Pixel size - 2µm	Supported protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS, HTTP/2, TLS2, 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, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf), IEEE 802.1X (EAP-TLS), IEEE 802.1AR
Lens	4.6 mm, F1.8 Horizontal field of view: 180° Vertical field of view: 90°Fixed iris		
Day and night	Automatically infrared-cut filter		
Minimum illumination	Color: 0.1 lux at 50 IRE F1.8 B/W: 0.03 lux at 50 IRE F1.8		
Shutter speed	1/8500 s to 1/5 s		
Camera angle adjustment	Pan ±176°, tilt 30° to 88°, roll ±7°		
Sensor	Axis Q3839-PVE		
System on chip (SoC)		System integration	
Model	ARTPEC-8 (x2)	Application programming interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; One-click cloud connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T
Memory	4096 (x2) MB RAM, 8192 MB Flash	Event conditions	Device status: above/below/within operating temperature, casing open, fan failure, IP address blocked, IP address removed, live stream active, network lost, new IP address, ring power overcurrent protection, system ready Digital audio input status Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: digital input, manual trigger, virtual input MQTT: stateless Scheduled and recurring: schedule Video: average bitrate degradation, day-night mode, tampering
Compute capabilities	Deep learning processing unit (DLPU)	Event actions	Day-night mode I/O: toggle I/O once, toggle I/O while the rule is active MQTT: publish Notification: HTTP, HTTPS, TCP and email Overlay text Recordings: SD card and network share SNMP traps: send, send while the rule is active Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email LEDs: flash status LED, flash status LED while the rule is active
Video		Analytics	
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	Applications	Included AXIS Object Analytics, AXIS Scene Metadata, AXIS Video Motion Detection, active tampering alarm, audio detection Supported Support for AXIS Camera Application Platform enabling installation of third-party applications
Resolution	7552x3776 to 512x256	Axis Object Analytics	Object classes: humans, vehicles (types: cars, buses, trucks, bikes, other) Scenarios: line crossing, object in area, time in area, crossline counting, occupancy in area, tailgating detection, PPE monitoringBETA, motion in area, motion line crossing Up to 10 scenarios Other features: triggered objects visualized with trajectories, color-coded bounding boxes and tables Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event
Frame rate	Up to 25/30 fps (50/60 Hz) in all resolutions	Axis Scene Metadata	AXIS Scene Metadata Object classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Object attributes: vehicle color, upper/lower clothing color, confidence, position
Video streaming	Up to 20 unique and configurable video streams Axis Zipstream technology in H.264 and H.265 VBR/ABR/MBR H.264/H.265 Low latency mode Video streaming indicator		
Image settings	Horizon straightening, saturation, contrast, brightness, sharpness, white balance, day/night threshold, local contrast, tone mapping, exposure mode, compression, dynamic text and image overlay, privacy masks, polygon privacy mask		
Image Processing	Axis Zipstream, Forensic WDR, Lightfinder 2.0		
Pan/Tilt/Zoom	Digital PTZ Control queue Lossless zoom		
Multi-view Streaming	Up to 8 individually cropped out view areas		
Audio			
Audio input	Input for external unbalanced microphone, optional 5 V microphone power Digital input, optional 12 V ring power Unbalanced line input		
Audio output	Output via network speaker pairing duplex)		
Audio streaming	Configurable duplex: One-way (simplex, half duplex)		
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, LPCM Configurable bitrate		
Audio features	Automatic gain control Network speaker pairing		
Cybersecurity			
Network Security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)3, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS3, TLS v1.2/v1.33, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall		

Specifications (continued)

General	
Casing (x)	A = Aluminum S = Stainless Steel
Weight	A = 28 lbs (13.2 kg) S = 55 lbs (24.95 kg)
Dimensions	Height: 13.2 in (335 mm) ø 8.6 in (218 mm)
Power	PoE IEEE 802.3af/802.3at Type 2 Class 4 Typical 9.74 W, Max 19.1 W
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 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/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 +55°C Certificate: FM17US0156X</p> <p>USA and Canada (Zones): Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta -20°C to +55°C, Type 4X, IP66/67 Zone 21, AEx/Ex tb IIIC T85 °C Db Ta = -20°C to +55°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 +55°C, IP66/67 II 2 D Ex tb IIIC T85 °C Db Ta = -20°C to +55°C, IP66/67 Certificate: FM18ATEX0057X</p> <p>IECEx: Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66/67 Ex tb IIIC T85 °C Db Ta = -20°C to +55°C, IP66/67 Certificate: FMG 18.0020X</p> <p>INMETRO: Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66/67 Ex tb IIIC Db T85 °C Ta = -20°C to +55°C, IP66/67 Certificate number: NCC 20.0083 X</p> <p>PESO: Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66/67 Ex tb IIIC T85 °C Db Ta = -20°C to +55°C, IP66/67 Certificate: FMG 18.0020X Approval No: A/P/HQ/MH/104/7899 (P578984)</p>
Video Management Software	AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners
Languages (Camera)	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

Approvals & Dimensions



FM
APPROVED



SPECTRUM
CAMERA SOLUTIONS

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

8935 ALMEDA GENOA RD.
HOUSTON, TEXAS 77075
USA

CERT NO. FM17US0156X

INPUT: IEE802.3af/ IEE802.3at 19.1W

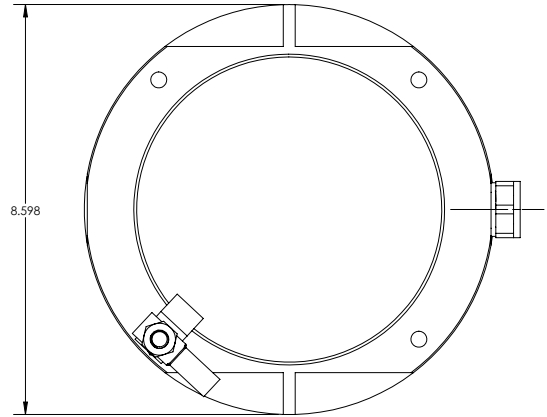
MODEL NUMBER: D401-X-Q3839-BD SERIAL: TIME-MO-DY-YEAR


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






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CAMERA SOLUTIONS


SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA



FM
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MADE IN USA
CERT NO.
FM17US0156X
FM18CA0103X



CE
UK
CA


2809
1725


MODEL: D401-X-Q3839-BD **SERIAL:**

INPUT: IEE802.3af/ IEE802.3at 19.1W


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

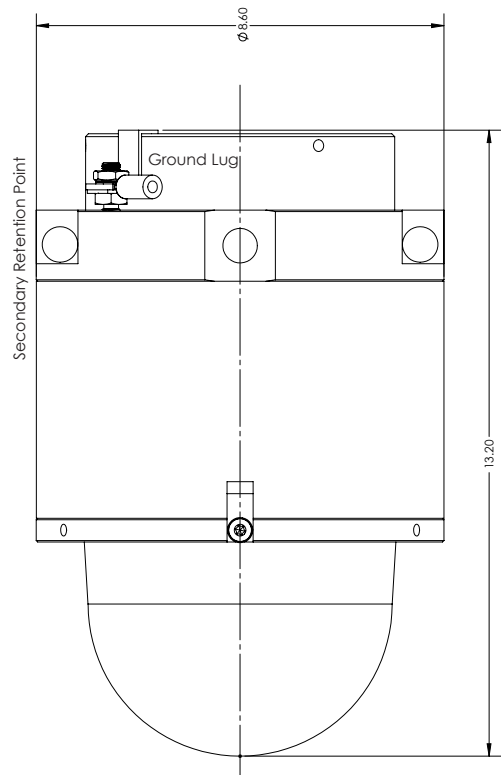
 II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +50°C, IP66


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





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CAMERA SOLUTIONS

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY



8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA

No. SÉRIE: TIME-DY-MN-YEAR

FABRICADO NO EUA
CERT NO. NCC 20.0083 X

MODELO: D401-X-Q3839-BD
ALIMENTAÇÃO: IEE802.3af/
IEE802.3at 19.1W

Segurança



Ex db IIB+H2 T6 Gb
Ex tb IIIC T85°C Db IP66/IP67
Ta = -20°C to +50°C
NCC 20.0083 X

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