SPECTRUM
CAMERA SOLUTIONS
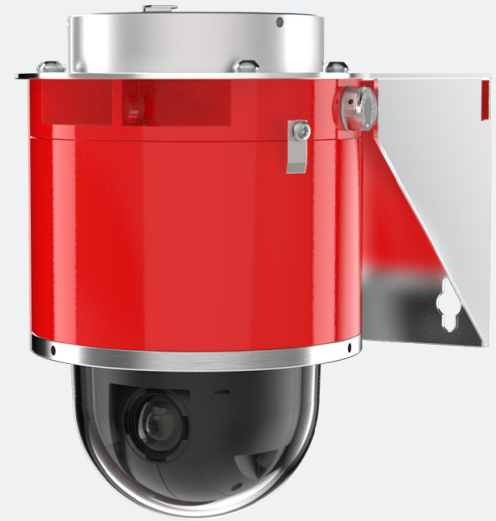SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

Spectrum D401-X-P5655-E-BD
Explosion-Proof HDTV 1080p with 32x zoom PTZ Camera

Key Features

- HDTV 1080p with 32x optical zoom
- Forensic WDR and lightfinder 2.0
- Signed firmware and secure boot
- Focus recall and EIS
- 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 +55°C

MADE IN U.S.A. | Ex | IECEx | INMETRO | FM APPROVED | HDTV NETWORK VIDEO | UKCA | 5 YEARS WARRANTY

Axis Camera Inside

Description

Spectrum D401-X-P5655-E-BD explosion-proof camera is a cost-efficient, high performance PTZ with HDTV 1080p and 32x optical zoom. 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 camera features Axis Forensic WDR for clarity in scenes that have both light and dark areas. Axis lightfinder 2.0 captures images in low-light while retaining rich colors and sharp detail in moving objects. Also, electronic image stabilization and ehanced security features such as signed firmware and secure boot are included in the camera.

Specifications

Spectrum D401-X-P5655-E-BD

Camera

Image sensor	1/2.8" progressive scan RGB CMOS
Lens	Varifocal, 4.3-137.6 mm, F1.4 - 4.0 Horizontal field of view: 58.3°- 2.4° Vertical field of view: 35.5°- 1.4° Including EIS, barrel and pincushion distortion correction Autofocus and auto-iris
Day and night	Automatically removable infrared-cut filter
Minimum illumination	Color: 0.1 lux at 30 IRE F1.4 B/W: 0.01 lux at 30 IRE F1.4
Shutter speed	1/66500 s to 2 s
Camera angle adjustment	Pan: 360° endless, 0.1°- 350°/s Tilt: 180°, 0.1°- 350°/s Zoom: 32x optical, 12x digital, Total 384x zoom 256 preset positions, nadir flip, limited guard tour, control queue, on-screen directional indicator, set new pan 0°, focus window, focus recall
Sensor	Axis P5655-E

System on chip (SoC)

Model	ARTPEC-7
Memory	1024 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	1920x1080 HDTV 1080p to 320x180
Frame rate	Up to 60/50 fps (60/50 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264, H.265 and Motion JPEG Controllable frame rate and bandwidth Axis Zipstream technology in H.264 and H.265 VBR/ABR/MBR H.264/H.265
Image settings	Compression, saturation, brightness, sharpness, contrast, local contrast, white balance, exposure control, exposure zones, Forensic WDR: Up to 120 dB depending on scene, defogging, day/night shift level, tone mapping, fine tuning of low-light behavior, rotation: 0°, 180°, text and image overlay, image freeze on PTZ, electronic image stabilization, scene profiles, 20 individual polygon privacy masks

Audio

Audio input/output	External microphone input or line input, line output (Requires Axis 10-pin Push-pull System Connector or Axis Multicable C I/O Audio Power 1 m/5 m, not included), automatic gain control
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

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, secure boot

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, SRTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, NTCIP, 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
Event conditions	Audio: Audio detection 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, Edge storage, Recording ongoing, Storage disruption I/O: Digital input, Manual trigger, Virtual input MQTT subscribe PTZ: PTZ malfunctioning, PTZ movement: Camera 1, PTZ preset position reached: Camera 1, PTZ ready Scheduled and recurring: Scheduled event Video: Day-night mode, Live stream open
Event actions	Play audio clips, day-night mode, go to preset position, guard tour, I/O, upload of images or video clips via FTP, SFTP, HTTP, HTTPS, network share and email, notification to email, HTTP, HTTPS, TCP and SNMP trap, overlay text, prioritized text, record video to SD card and network share, WDR mode MQTT publish
Data streaming	Event data
Built-in installation aids	Pixel counter

Analytics

Applications	Included AXIS Object Analytics AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, audio detection, advanced gatekeeper, autotracker 2 Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap
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

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	44 - 57 Vdc 19W
Storage Conditions	-40°C to 65°C Humidity 5–95% RH (non-condensing)
Operating Conditions	-20°C to +55°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/IEN/EC/CAN/CSA-C22.2 60079-31 **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 **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 (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 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 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 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 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
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

Approvals & Dimensions

FM APPROVED

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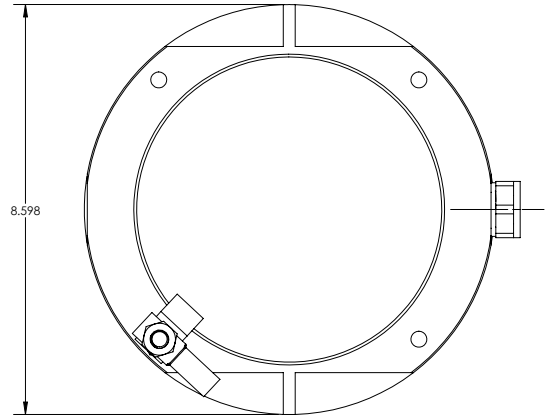
8935 ALMEDA GENOA RD.
HOUSTON, TEXAS 77075
USA

CERT NO. FM17US0156X

INPUT: 44-57 Vdc 19W

MODEL NUMBER: D401-A-P5655-E-BD   SERIAL:

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 +55°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
C   US

MADE IN USA
CERT NO.
FM17US0156X
FM18CA0103X

CE 2809
UKCA 1725

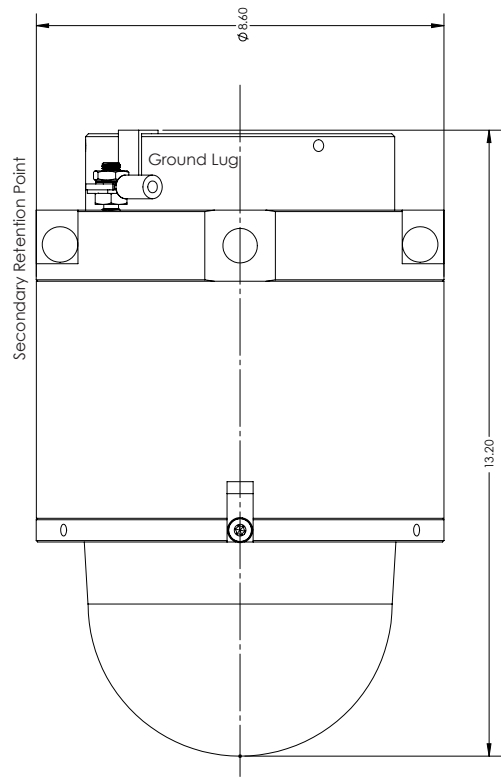**MODEL:** D401-A-P5655-E-BD   **SERIAL:**
INPUT: 44-57 Vdc 19W

Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, Type 4X, IP66
Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -20°C to +55°C, Type 4X, IP66

Ex II 2 G   Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66
II 2 D   Ex tb IIIC T85°C Db Ta = -20°C to +55°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
www.spectrumcamera.com   US Patent D858611

SPECTRUM 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-A-P5655-E-BD
ALIMENTAÇÃO:57Vdc 19W

Segurança
INMETRO NC OCP 0034
Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C
Ex tb IIIC T85°C Db Ta = -20°C to +55°C
NCC 20.0083 X

NCC 20.0083 X
Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C
Ex tb IIIC T85°C Db Ta = -20°C to +55°C
IP66

ATENÇÃO:
- ENTRADAS DE CABOS M20 X 1.5
- NÃO ABRA ENQUANTO UMA ATMOSFERA EXPLOSIVA PUDER 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

8.598

Ø 8.60

Secondary Retention Point

Ground Lug

13.20

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Texas 77075 | 281-769-8802 | sales@spectrumcamera.com
www.spectrumcamera.com

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