

Spectrum F101-P1378-BD

Explosion-Proof 4K fixed Camera

Key Features

- 4K resolution
- Axis Lightfinder and Forensic WDR
- Signed firmware and secure boot
- Electronic image stabilization
- 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, INMETRO and UKCA approved
- Operating Temperature:
 - Zone System: -50°C to +60°C
 - (USA) Class/Division System: -40°C to +60°C
- F1XX-TO & SF-RSK Included



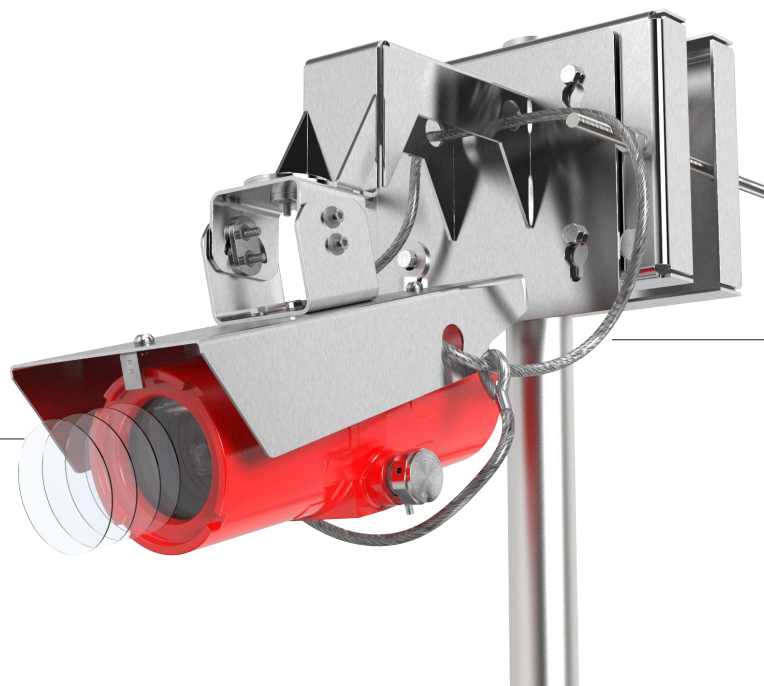
Axis Camera Inside



Description

Spectrum F101-P1378-BD explosion-proof network camera delivers excellent detailed images in 4K resolution.

Enclosed in a red aluminum explosion-proof housing, it's certified (cFMus, ATEX, IECEx, UKCA approved and INMETRO) for use in potentially combustible environments. The camera features Axis Lightfinder and Axis Forensic WDR, it delivers rich colors and sharp details in challenging light or dark areas. It also offers P-iris for images with better contrast, clarity, resolution and depth of field. Furthermore, electronic image stabilization and enhanced security features are included.



F1XX-TO

Front Glass Protective Film
4-Layer peel off design

SF-RSK
Reliable Securing Kit

Specifications

Spectrum F101-P1378-BD

Camera		Supported protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS, HTTP/2, TLSa, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, RTSP, RTP, SRTP, SFTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, LLDP, CDP, MQTT v3.1.1, Syslog, Link-Local address (ZeroConf)
Image sensor	1/1.8" progressive scan RGB CMOS		
Lens	IR corrected, CS-mount lens, P-Iris Varifocal 3.9–10 mm, F1.5 Horizontal field of view: 119°–45° Vertical field of view: 62°–25°		
Day and night	Automatically removable infrared-cut filter		
Minimum illumination	4K 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	1/8500 s to 1/5 s		
Sensor	Axis P1378 Barebone		
System on chip (SoC)		System integration	
Model	ARTPEC-7	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 M, ONVIF® Profile S, and ONVIF® Profile T, specification at onvif.org
Memory	2 GB RAM, 512 MB Flash	Onscreen controls	Electronic image stabilization Day/night shift Defogging Wide dynamic range
Compute capabilities	Machine learning processing unit (MLPU)	Event triggers	Analytics, shock detection, edge storage events, supervised external input, audio level, time scheduled MQTT subscribe
Video		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, WDR mode, day/night mode
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Motion JPEG	Data streaming	Event data
Resolution	3840x2160 (4K) to 160x90	Built-in installation aids	Focus assistant, pixel counter, remote back focus, autorotation
Frame rate	25/30 fps (50/60 Hz) in all resolutions	Analytics	
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	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
Multi-view streaming	Up to 8 individually cropped out view areas	Applications	Included AXIS Object Analytics AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, active tampering alarm, audio detection Supported AXIS Live Privacy Shield 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
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, orientation: 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), automatic gain control		
Network			
Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X (EAP-TLS) network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot		

Specifications

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	57VDC, 10.7W Heater: 12-24 VAC/VDC, 25W
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	<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 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</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: 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</p> <p>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°C, Type 4X, IP66 Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -50°C to +60°C, Type 4X, IP66 Certificate: FM18CA0126X</p> <p>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</p> <p>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</p>
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, Polish

Upgraded i-CS lens option

Spectrum F101-P1378-BD-iCS

Explosion-proof 4K fixed camera with upgraded i-CS lens

Key Features
IR-corrected lens
F-number 1.5
Focal length 2.9 - 10mm



This i-CS lens features the most recent industry standard in intelligent CS-mount optics.

It includes three motors, which enable automatic and remote zoom, focus, and iris opening. Lens i-CS 3.9-10 mm F1.5 8 MP offers great flexibility to your installation thanks to its open protocol and the ability for the camera to interface with multiple features.

The lens is IR-corrected. This means that you don't need to adjust the camera's focus when you shift between day and night mode using the IR-cut filter.

Approvals & Dimensions

SPECTRUM
CAMERA SOLUTIONS

8935 ALMEDA GENOA RD., HOUSTON, TEXAS 77075 USA

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

SERIAL: _____

UK CA
1725

FM **US** **APPROVED**

MADE IN USA

CERT NO. FM18US0262X & FM18CA0126X

MODEL: F101-P1378-BD
INPUT: 57VDC, 10.5 W;
HEATER: 12-24VDC/VAC, 25 W

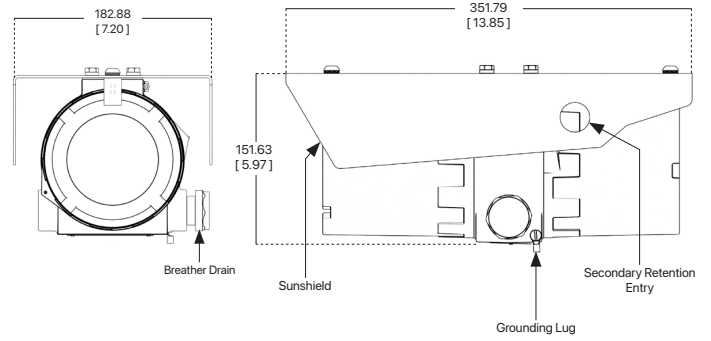
US: Class I Division 1 Groups BCD T6 Ta= -40°C to +60°C, Type 4X, IP66
Class II/III Division 1 Groups EFG T6 Ta= -40°C to +60°C, Type 4X, IP66
Canada: Class I Division 1 Groups BCD T6 Ta= -50°C to +60°C, Type 4X, IP66
Class II/III Division 1 Groups EFG T6 Ta= -50°C to +60°C, Type 4X, IP66
Class I, Zone 1, AEx/Ex db IIB+H2 Gb Ta = -50°C to +60°C, Type 4X, IP66
Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -50°C to +60°C, Type 4X, IP66
II 2 G Ex db IIB+H2 Gb Ta = -50°C to +60°C, IP66
II 2 D Ex tb IIIC T85°C Db Ta = -50°C to +60°C, IP66

CERT NO. FM18ATEX0073X, IECEx FMG 18.0029X, & FM22UKEX0016X

CODE	CONFIGURATION
T5	WITH BREATHEDRAIN
T6	WITHOUT BREATHEDRAIN

WARNING: DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT. Install seal within 18 inches. For Zones, install seal at entry. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTION. USE 80°C OR HIGHER RATED CONDUCTORS.

AVERTISSEMENT: NE PAS OUVRIR LORSQU'ENERGISE OU QUAND UNE ATMOSPHERE EXPLOSIVE PEUT ETRE PRESENTE. Les joints de fermeture sont obligatoires dans une distance de 18 pouces. Pour les zones, installez un sceau à l'entrée. AVERTISSEMENT - RISQUE DE CHARGE ÉLECTROSTATIQUE POTENTIEL - VOIR LES INSTRUCTIONS. UTILISEZ DES CONDUCTEURS COTÉS DE 80 °C OU PLUS.



SPECTRUM
CAMERA SOLUTIONS

8935 ALMEDA GENOA RD., HOUSTON, TEXAS 77075 USA

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

No. DE SÉRIE: _____

Segurança

INMETRO **OCF 0034**

NCC 20.0084 X

FABRICADO NO EUA

CERT NO. NCC 20.0084 X

MODELO: F101-P1378-BD
ALIMENTAÇÃO: 57 VDC, 10.5W;
12-24 VAC/VDC, 25W

NCC 20.0084 X
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

ATENÇÃO: NÃO ABRA ENQUANTO ENERGIZADO OU QUANDO ATMOSFERA EXPLOSIVA PUDE ESTAR PRESENTES. 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