

# Spectrum F101-P1377-BD

Explosion-Proof 5MP fixed Camera

## Key Features

- 30fps in 5MP or up to 180fps in HDTV 720p
- 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
- Upgraded i-CS lens option available (see page 3)
- 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

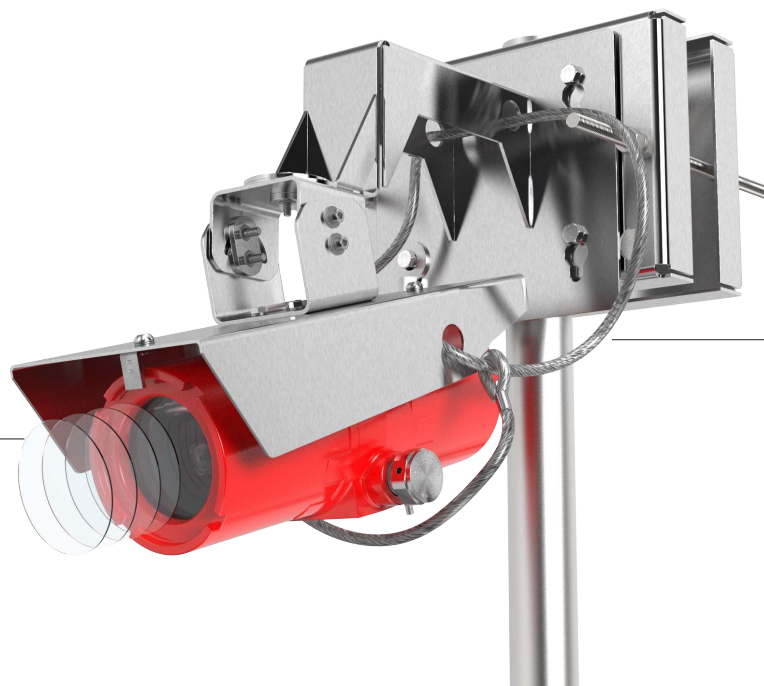


Axis Camera Inside



## Description

Spectrum F101-P1377-BD explosion-proof network camera delivers excellent 5MP 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-P1377-BD

<b>Camera</b>		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	1/2.7" progressive scan RGB CMOS		
Lens	IR corrected, CS-mount lens, P-Iris Varifocal 2.8–8 mm, F1.2 Horizontal field of view: 111°–38° Vertical field of view: 81°–28°		
Day and night	Automatically removable infrared-cut filter		
Minimum illumination	5 MP 25/30 fps with Forensic WDR and Lightfinder: Color: 0.13 lux, at 50 IRE F1.2 B/W: 0.03 lux, at 50 IRE F1.2		
Shutter speed	WDR: 1/33500 s to 1/5 s No WDR: 1/50000 s to 1/5 s		
Sensor	Axis F101-A XF P1377		
<b>System on chip (SoC)</b>		<b>System integration</b>	
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	1 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
<b>Video</b>		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	2592x1944 (5 MP) to 160x90 2688x1512 (4 MP) to 160x90 1280x720 (HDTV 720p) to 160x90	Built-in installation aids	Focus assistant, pixel counter, remote back focus, autorotation
Frame rate	Capture mode 5 MP: 25/30 fps (50/60 Hz) Capture mode 4 MP: 25/30 fps (50/60 Hz) Capture mode HDTV 720p: 180 fps	<b>Analytics</b>	
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)		
<b>Audio</b>			
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		
<b>Network</b>			
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		

# Specifications (continued)

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	Camera: Power over Ethernet (PoE) 57 VDC IEEE 802.3af/802.3at Type 1 Class 3, max 10.7W, typical 5.4W 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 <a href="http://spectrumcamera.com/warranty">spectrumcamera.com/warranty</a>
Approvals	<b>Hazardous Area</b> 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 <b>EMC</b> 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 <b>Safety</b> IEC/EN/UL 60950-22, IEC/EN/UL 62368-1, IS 13252 <b>Environment</b> 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) <b>Network</b> NIST SP500-267
Explosion-proof Certifications	<b>USA:</b> 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 <b>Canada:</b> 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 <b>ATEX:</b> 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 <b>IECEx:</b> 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 <a href="http://axis.com/vms">axis.com/ vms</a>
Languages (Camera)	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Polish

## Upgraded i-CS lens option

### Spectrum F101-P1377-BD-iCS

Explosion-proof 5MP fixed camera with upgraded i-CS lens

Key Features
IR-corrected lens
F-number 1.2
Focal length 2.8-8.5mm
Supports sensors up to 1/2.7"



The Spectrum F101-P1377-BD-iCS lens upgrade features the most recent industry standard in intelligent CS-mount optics.


The i-CS lens includes three motors, which enable automatic and remote zoom, focus, and iris opening.

Lens Computar i-CS 2.8-8.5 mm 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



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

SERIAL: \_\_\_\_\_




MADE IN USA

CERT NO. FM1818U50262X & FM18CA0126X

MODEL: F101-P1377-BD

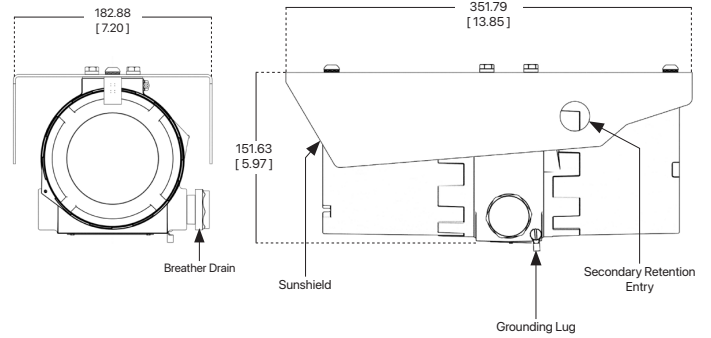
INPUT: 57VDC, 10.7W;  
HEATER: 12-24VDC/VAC, 25 W




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 SEE TABLE FOR CODE 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 SEE TABLE FOR CODE 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, & FM22ZUKEX0010X

CODE	CONFIGURATION
I2	WITH BREATHERDRANK
T6	WITHOUT BREATHERDRANK

**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. **AVERTISSEMENT:** NE PAS OUVRIRE LORSQU'ENERGISE OU QUAND UNE ATMOSPHERE EXPLOSIVE PEUT ETRE PRESENTE. LES JOINTS DE FERMETURE SONT OBLIGATOIRES DANS UNE DISTANCE DE 18 POUCE. Pour les zones, installez un scellum à l'entrée. **AVERTISSEMENT:** RISQUE DE CHARGE ÉLECTROSTATIQUE POTENTIEL - VOIR LES INSTRUCTIONS, UTILISEZ DES CONDUCTEURS COTÉS DE 80 °C OU PLUS.





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


No. DE SÉRIE: \_\_\_\_\_

FABRICADO NO EUA

CERT NO. NCC 20.0084 X


MODELO: F101-P1377-BD

ALIMENTAÇÃO: 57 VDC, 10.7W;  
12-24 VAC/VDC, 25W



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 SEE TABLE FOR CODE 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 SEE TABLE FOR CODE 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. NCC 20.0084 X

**Segurança**



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 PUDER ESTAR PRESENTE. INSTALAR O ANEL DE VEDAÇÃO DA ENTRADA. **ATENÇÃO:** - RISCO POTENCIAL DE CARGAS ELETROSTÁTICAS - VER INSTRUÇÕES. USAR CONDUCTORES ADEQUADOS PARA TEMPERATURAS ATÉ 80°C. **ATENÇÃO:** - NÃO ABRIR QUANDO ENERGIZADO. **ATENÇÃO:** - RISCO POTENCIAL DE CARGA ELETROSTÁTICA - VER INSTRUÇÕES