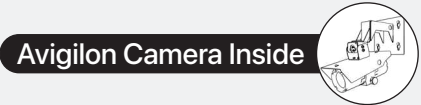


Spectrum F110-XXCH5ABX-BD

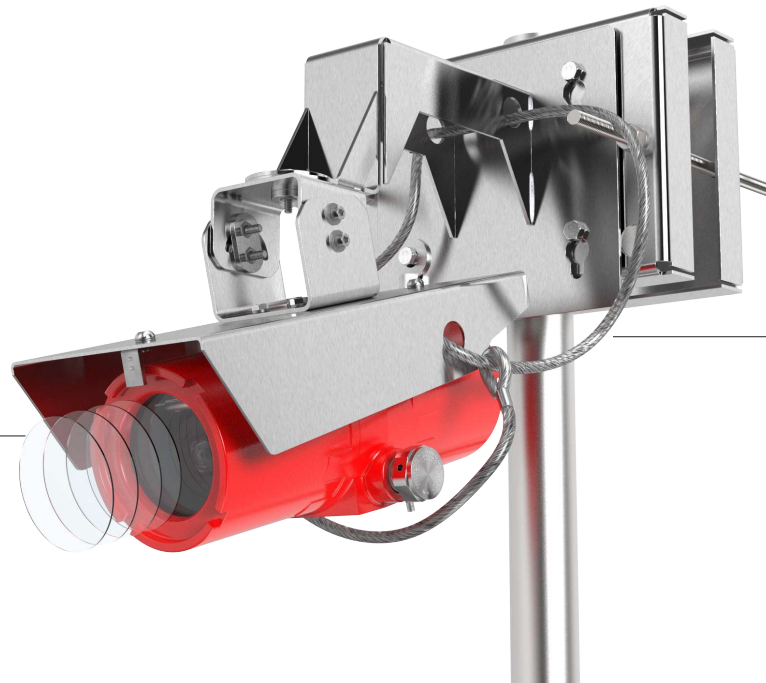
2MP | 4MP | 5MP | 6MP | 8MP (4K Ultra HD)

Key Features

- Next-Generation Video Analytics
- H.265 Technology
- Wide Dynamic Range
- Focus of attention
- Low-light Technology
- ONVIF® Compliant
- 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



Part Number	MP	WDR	Low-light Technology	Lens	Analytics	H.265 Technology	Avigilon Camera
F110-2.0CH5AB1-BD	2.0	Included	Included	4.7 - 84.6 mm	Included	Included	2.0C-H5A-B1
F110-2.0CH5AB2-BD	2.0	Included	Included	3.3 - 9 mm	Included	Included	2.0C-H5A-B2
F110-2.0CH5AB3-BD	2.0	Included	Included	9 - 22 mm	Included	Included	2.0C-H5A-B3
F110-4.0CH5AB2-BD	4.0	Included	Included	3.3 - 9 mm	Included	Included	4.0C-H5A-B2
F110-4.0CH5AB3-BD	4.0	Included	Included	9 - 22 mm	Included	Included	4.0C-H5A-B3
F110-6.0CH5AB2-BD	6.0	Included	Included	4.9 - 8 mm	Included	Included	6.0C-H5A-B2
F110-8.0CH5AB2-BD	8.0	Included	Included	4.9 - 8 mm	Included	Included	8.0C-H5A-B2



F1XX-TO
Front Glass Protective Film
4-Layer peel off design

SF-RSK
Reliable Securing Kit

Specifications


Spectrum F110-XXCH5ABX-BD

Lens					
		3.3 - 9 mm	4.9 - 8 mm	9 - 22 mm	4.7 - 84.6 mm
Minimum Illumination	2 MP	TBD	N/A	TBD	TBD
	4 MP	TBD	N/A	TBD	N/A
	5 MP	N/A	N/A	TBD	N/A
	6 MP	N/A	TBD	N/A	N/A
	8 MP	N/A	TBD	N/A	N/A
Horizontal Angle of View Based on Aspect Ratio	2 MP	(16:9) 34° - 99°	N/A	(16:9) 14° - 31°	(16:9) 4.1° - 60°
	4 MP	(16:9)(4:3) 34° - 92°	N/A	(16:9)(4:3) 14° - 31°	N/A
	5 MP	N/A	N/A	(16:9)(4:3) 14° - 31°	N/A
	6 MP	N/A	(16:9) 52° - 92° (3:2) 41° - 73°	N/A	N/A
	8 MP	N/A	(16:9) 29° - 51°	N/A	N/A
Vertical Angle of View Based on Aspect Ratio	2 MP	(16:9) 18° - 53°	N/A	(16:9) 7.8° - 16.7°	(16:9) 2.3° - 34°
	4 MP	(16:9) 18° - 50° (4:3) 25° - 68°	N/A	(16:9) 8.2° - 17.4°	N/A
	5 MP	N/A	N/A	(16:9) 8.1° - 17.4° (4:3) 11° - 23°	N/A
	6 MP	N/A	(16:9) 29° - 51° (3:2) 27° - 48°	N/A	N/A
	8 MP	N/A	(16:9) 29° - 51°	N/A	N/A
Max Aperture		F1.3	F1.8	F1.6	F1.6
Control	P-Iris, Remote Focus and Zoom				
Image Control					
Image Compression Method	H.264, H.265, Motion JPEG				
Streaming	Multi-stream H.264, Multi-stream H.265, Motion JPEG; 2.0 on 4.0 MP, 5.0 MP, 6.0 MP, and 4k (8.0 MP) cameras				
Motion Detection	Pixel motion: selectable sensitivity and threshold. Classified object detection				
Camera Tamper Detection	Yes				
Electronic Shutter Control	Automatic, Manual (1/7 to 1/8196 sec)				
Iris Control	Automatic, Open, Closed				
Day/Night Control	Automatic, Manual				
Flicker Control	60 Hz, 50 Hz				
White Balance	Automatic, Manual				
Backlight Compensation	Adjustable				
Privacy Zones	Up to 64 zones				
Auxiliary I/O					
Audio Compression Method	G.711 PCM 8 kHz				
Audio Input/Output	Line level input and output				
External I/O Terminals	Alarm In, Alarm Out				
RS-485 Terminal	Yes, Box camera only				
Network					
Network	100BASE-TX , RJ45 Connector, CAT5e Cabling				
ONVIF	ONVIF compliance version 1.02, 2.00, Profile S, Profile T (www.onvif.org)				
Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication				
Protocols	IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, Zeroconf. ARP				
Streaming Protocols	RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP				
Device Management Protocols	SNMP v2c, SNMP v3				
Peripherals					
USB Port	USB 2.0				
Onboard Storage	SD/SDHC/SDXC slot - class 10/UHS-1 or better recommended				


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	57 VDC, 7 W;
Heater	12 - 24 VDC/VAC, 25W
Storage	-10°C to +70°C (14°F to 158°F)
Operating Conditions	Zone system: -50°C to +60°C (USA) Class/Division system: -40°C to +60°C Humidity 10-100% RH (condensing)
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 certification	<p>USA: Class I Division 1 Groups BCD T6 Ta= -40°C to +50°C, Type 4X, IP66 Class II/III Division 1 Groups EFG Ta= -40°C to +50°C, Type 4X, IP66 Certificate: FM18US0262X</p> <p>Canada: Class I Division 1 Groups BCD T6 Ta= -50°C to +50°C, Type 4X, IP66 Class II/III Division 1 Groups EFG Ta= -50°C to +50°C, Type 4X, IP66 Class I, Zone 1, AEx/Ex db IIB+H2 T5 Gb Ta = -50°C to +50°C, Type 4X, IP66 Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -50°C to +50°C, Type 4X, IP66 Certificate: FM18CA0126X</p> <p>ATEX: II 2 G Ex db IIB+H2 T5 Gb Ta = -50°C to +50°C, IP66 II 2 D Ex tb IIIC T85°C Db Ta = -50°C to +50°C, IP66 Certificate: FM18ATEX0073X</p> <p>IECEX: Ex db IIB+H2 T5 Gb Ta = -50°C to +50°C, IP66 Ex tb IIIC T85°C Db Ta = -50°C to +50°C, IP66 Certificate: IECEX FMG 18.0029X</p>
Supported Analytics Events	
Objects in Area	The event is triggered when the selected object type moves into the region of interest.
Objects Loitering	The event is triggered when the selected object type moves into the region of interest and then stays for an extended amount of time.
Objects Crossing Beam	The event is triggered when the specified number of objects have crossed the directional beam that is configured over the camera's field of view. The beam can be unidirectional or bidirectional.
Object Appears or Enters Area	The event is triggered by each object that enters the region of interest. This event can be used to count objects.
Objects not present in Area	The event is triggered when no objects are present in the region of interest.
Objects Enter Area	The event is triggered when the specified number of objects have entered the region of interest.
Objects Leave Area	The event is triggered when the specified number of objects have left the region of interest.
Object Stops in Area	The event is triggered when an object moves into a prohibited area of travel.
Direction Violated	The event is triggered when an object moves into the prohibited direction of travel.
Tamper Detection	The event is triggered when the scene unexpectedly changes.
Supported Classified Object Types	
Object Types in Outdoor Mode	Vehicle, sub-types: Car, Truck, Bicycle, Motorcycle, Bus, Person
Object Types in indoor Mode	Person

Approvals & Dimensions




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



MADE IN USA

CERT NO. FM18US0262X & FM18CA0126X
MODEL: F1XX-(CCCC)-BD
INPUT: 57VDC, X.X W;
HEATER: 12-24VDC/VAC, XX W

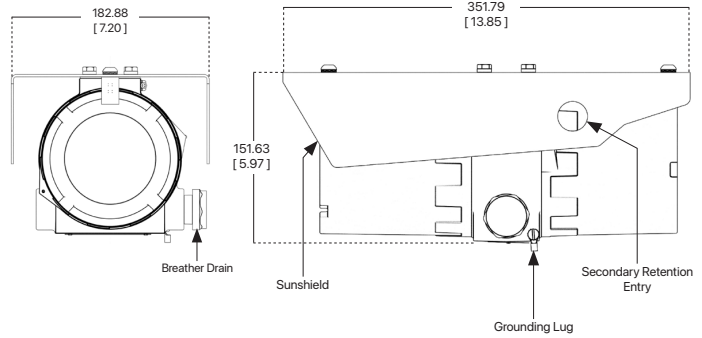



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US: Class I Division 1 Groups BCD T6 Ta= -40°C to +60°C, Type 4X, IP66
 Class II/III Division 1 Groups EFG T6 Ta= -40°C to +60°C, Type 4X, IP66
 Canada: Class I Division 1 Groups BCD T6 Ta= -50°C to +60°C, Type 4X, IP66
 Class II/III Division 1 Groups 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, & FM22UXE0016X

CODE	CONFIGURATION
TS	WITH BREATHEDRAIN
TG	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 Remplacement sont obligatoires dans une distance de 18 pouces. 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 OÙ PLUS.**






SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA
No. DE SÉRIE: TIME-MO-DY-YEAR

FABRICADO NO EUA

CERT NO. NCC 20.0084 X

MODELO: F110-XXCH5ABX-BD
ALIMENTAÇÃO: 57 VDC, 7W;
AQUECEDOR: 12-24 VAC/VDC, 25W



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 ATMOSPHERA EXPLOSIVA PUDE 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**