



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX FMG 24.0028X** Page 1 of 4 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2024-12-17

Applicant: **Spectrum Camera Solutions LLC**
8935 Almeda Genoa Road
Houston, TX 77075
United States of America

Equipment: **F2xx Series Network Ethernet Cameras**

Optional accessory:

Type of Protection: **Flameproof, d and Protection by enclosure, t**

Marking: **IECEX FMG 24.0028X**

Ex db IIB+H2 Gb

Ex db mb [ja Ga] IIB+H2 Gb (with optional antenna coupler)

Ex tb IIIC Db

Ex mb tb [ja Da] IIIC Db (with optional antenna coupler)

Refer to the 'EQUIPMENT (CONTINUED)' section for ambient temperature and temperature code information.

Actual product markings may vary depending on the configuration and may or may not include all of the markings shown above.

Approved for issue on behalf of the IECEx
Certification Body:

J. E. Marquedant

Position:

VP, Manager - Electrical Systems

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

FM Approvals LLC
One Technology Way
Norwood MA 02062
United States of America





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Manufacturer: **Spectrum Camera Solutions LLC**
8935 Almeda Genoa Road
Houston, TX 77075
United States of America

Manufacturing locations: **Spectrum Camera Solutions LLC**
8935 Almeda Genoa Road
Houston, TX 77075
United States of America

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-18:2017](#) Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

[IEC 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[US/FMG/ExTR24.0032/00](#)

Quality Assessment Report:

[GB/FME/QAR17.0010/05](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The F2xx Series Network Ethernet Cameras are designed to provide CCTV monitoring in hazardous environments.

The F2xx Series Network Ethernet Cameras are housed in a single compartment enclosure with blind and window thread-on covers. The enclosure contains three threaded entries available as 3/4 inch 14-NPT or M25 x 1.5 mm.

The F2xx Series Network Ethernet Cameras can be supplied with a variety of cameras and other devices in accordance with IEC 60950 and/or IEC 62368. The equipment can be powered by 120-240 Vac (50/60 Hz), 12 Vdc, 24 Vdc or via PoE (Power over Ethernet; IEEE 802.3bt). The total maximum wattage of the equipment in any voltage configuration shall not exceed the tested configuration of 90 W. The equipment contains a heater and thermostat to prevent condensation within the enclosure and fogging of the enclosure window. The equipment can be optionally supplied with a wireless transmitting device in accordance with IEC 62368 with an externally mounted antenna. The antenna is sealed/separated from the enclosure via a certified antenna coupler/barrier.

The F2xx Series Network Ethernet Cameras were evaluated for a maximum operating temperature range of -50°C to +90°C. However, the product may be marked for narrower operating temperature ranges depending on the configuration.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Flameproof joints are not intended to be repaired. Consult the manufacturer if dimensional information on the flameproof joints is necessary.
2. Follow the manufacturer's instructions to reduce the potential of an electrostatic charging hazard on the surface of the equipment in Group II and III environments.
3. The equipment within the enclosure may be placed in any arrangement provided that an area of at least 20% of each cross-sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided each area has a minimum dimension, in any direction, of 12.5 mm.



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Equipment (continued):

F2a-xx-b-c. Network Ethernet Camera.

a = Sensor: (two digits from 00 to 99).

b = Power: 01, 02, 03 or 04.

c = Network: 01 or 02.

x = Options not affecting the equipment safety.

Ambient Temperature	Temperature Code - Gas	Temperature Code - Dust
-50°C to +50°C	T6	T85°C
-50°C to +65°C	T5	T100°C
-50°C to +90°C	T4	T125°C

Wireless Version (with antenna coupler):

F2a-xx-b-03-c-xx. Network Ethernet Camera.

a = Sensor: (two digits from 00 to 99).

b = Power: 01, 02, 03 or 04.

c = Wireless: (two digits from 00 to 99).

x = Options not affecting the equipment safety.

Ambient Temperature	Temperature Code - Gas	Temperature Code - Dust
-40°C to +50°C	T6	T85°C
-40°C to +65°C	T5	T100°C
-40°C to +70°C	T4	T105°C
-40°C to +85°C	T4	T120°C