



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 18.0029X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2019-07-09\)](#)
[Issue 0 \(2018-10-24\)](#)
Date of Issue: 2022-04-18
Applicant: **Spectrum Camera Solutions LLC**
8935 Almeda Genoa Road
Houston, TX 77075
United States of America
Equipment: **F1xx Series Network Ethernet Camera**
Optional accessory:
Type of Protection: **Flameproof, d; Protection by enclosure, t**
Marking: **IECEX FMG 18.0029X**
Ex db IIB+H2 * Gb Ta = -50°C to +60°C, IP66
Ex tb IIIC T85°C Db Ta = -50°C to +60°C, IP66

*T6 without optional breather/drain
*T5 with optional breather/drain

Approved for issue on behalf of the IECEx
Certification Body:

J. E. Marequedant

Position:

VP, Manager - Electrical Systems

Signature:
(for printed version)

Date:
(for printed version)

1 December 2022

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
1151 Boston-Providence Turnpike
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 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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 Reports:

[US/FMG/ExTR18.0024/00](#)

[US/FMG/ExTR18.0024/01](#)

[US/FMG/ExTR18.0024/02](#)

Quality Assessment Report:

[GB/FME/QAR17.0010/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The F1xx Series Network Ethernet Cameras are designed to provide CCTV monitoring in hazardous environments. The F1xx Network Ethernet Cameras are housed in an IECEX certified single compartment enclosure with blind and window thread-on covers. The enclosure contains two threaded entries available as 3/4 inch NPT. The enclosure is IECEX certified as Flameproof, Ex db IIB+H2 Gb, IP66; and Protection by enclosure, Ex tb IIIC Db, IP66 under IECEX UL 08.0005U. The optional breather/drain is IECEX certified as Flameproof, Ex db IIC Gb; and Protection by enclosure, Ex ta IIIC Da under IECEX CML 18.0187U.

The F1xx Series Network Ethernet Cameras can be supplied with a variety of cameras and devices (in accordance with EN 60950 or EN 62368) complying with the IEEE 802.3af or 802.3at PoE (Power over Ethernet) standard (57 Vdc max). Voltage and wattage shall not exceed the maximum tested configuration of 57 Vdc (10 W) for the camera and 12-30 V (26 W) for the heater. The total maximum wattage shall not exceed 36 W in any voltage configuration and/or combination in accordance with the IEC 60950 or IEC 62368 power requirements. The F1xx Series Network Ethernet Cameras are rated for use in an ambient temperature range of -50°C to +60°C and are IP66. The camera within the enclosure may be placed in any arrangement provided that an area of at least 40% 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.

F1a-b-c. Network Ethernet Camera.

a = Camera manufacturer code (two digits) 01 to 99.

b = Camera manufacturer part number (up to six digits).

c = Optional breather/drain BLANK or BD.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The flameproof joints of the equipment 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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

IEC 60079-0 examination updated to the 2017 edition. Clarification of flameproof temperature code. Other minor documentation changes not affecting the equipment safety.