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 23.0019X** Page 1 of 3 Certificate history:

Status: **Current** Issue No: 0

Date of Issue: 2023-09-18

Applicant: **Sierra Instruments Inc.**
5 Harris Court
Building L
Monterey, CA 93940
United States of America

Equipment: **645S, 745S and TM100 Series Thermal Mass Gas Flow Meter and Temperature Transmitter**

Optional accessory:

Type of Protection: **Flameproof, d; Enclosure, t**

Marking: IECEx FMG 23.0019X

Ex db IIB+H2 T4 Gb Ta = -40°C to +70°C, IP66/67

Ex tb IIIC T135°C Db Ta = -40°C to +70°C, IP66/67

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
1151 Boston-Providence Turnpike
Norwood, MA 02062
United States of America

FM Approvals
Member of the FM Global Group

IECEx Certificate of Conformity

Certificate No.: **IECEx FMG 23.0019X**

Date of issue: 2023-09-18 Issue No: 0

Manufacturer: **Sierra Instruments Inc.**
5 Harris Court
Building L
Monterey, CA 93940
United States of America

Manufacturing locations: **Sierra Instruments Inc.**
5 Harris Court
Building L
Monterey, CA 93940
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 60079-31:2013 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 Report:

US/FMG/ExTR23.0020/00

Quality Assessment Report:

GB/FME/QAR13.0016/06

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

a-b-c-d-e. Thermal Mass Gas Flow Meter and Temperature Transmitter (Insertion).

a = Model 645S or TM100.

b = Probe 04I, 05I, 06I, 07I, 08I, 09I, 10I, 11I, 12I, 13I, 14I, 15I, 16I, 17I, 18I, 19I, 20I, 21I, 22I, 23I, 24I, 25I, 26I, 27I, 28I, 29I, 30I, 31I, 32I, 33I, 34I, 35I, 36I, 15R, 18R, 24R, 30R or 36R.

c = Sensor material SH, SJ, SL or BLANK.

d = Display D0 or DD.

e = Output BH, P1 or RS.

a-b-c-d-e. Thermal Mass Gas Flow Meter and Temperature Transmitter (Inline).

a = Model 745S or TM100.

b = Flow body 075F, 10F, 15F, 20F, 25F, 30F, 40F, 60F, 125F, 10FC, 15FC, 20FC, 25FC, 30FC, 40FC, 60FC, 125FC, 075P, 10P, 15P, 20P, 25P, 30P, 40P, 125P, 10PC, 15PC, 20PC, 25PC, 30PC, 40PC or 125PC.

c = Sensor material SH or BLANK.

d = Display D0 or DD.

e = Output BH, P1 or RS.

SPECIFIC CONDITIONS OF USE: YES as shown below:
1. The flamepaths of the equipment are not intended to be repaired. Consult the manufacturer if repair of the flamepath joints is necessary.

2. Refer to the manufacturer's instructions to reduce the potential of an electrostatic charging hazard on the equipment enclosure.