

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: IECEx CML 20.0046X

Page 1 of 4
Issue No: 1

Certificate history: Issue 0 (2020-08-03)

Status: Current

Date of Issue: 2021-05-04

Applicant: Status Instruments

Status Business Park Gannaway Lane Tewkesbury Gloucestershire GL20 8FD United Kingdom

Equipment: SEM320X Universal Temperature Transmitter/Display

Optional accessory:

Type of Protection: Intrinsically safe

Marking: Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da

Tamb = -40°C to +85°C

Approved for issue on behalf of the IECEx

Certification Body:

Position:

Date:

Signature:

(for printed version)

This certificate and schedule may only be reproduced in full.
 This certificate is not transferable and remains the property of the issuing body.

The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

H M Amos

Certification Manager

4th May 2021



Certificate issued by:

Eurofins E&E CML Limited Unit 1, Newport Business Park New Port Road Ellesmere Port, CH65 4LZ United Kingdom







Certificate No.: IECEx CML 20.0046X Page 2 of 4

Date of issue: 2021-05-04 Issue No: 1

Manufacturer: Status Instruments

Status Business Park Gannaway Lane Tewkesbury Gloucestershire GL20 8FD United Kingdom

Additional manufacturing locations:

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

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

IEC 60079-11:2011

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:

GB/CML/ExTR20.0058/00

Quality Assessment Report:

GB/CML/QAR21.0004/00



Certificate No.: IECEx CML 20.0046X Page 3 of 4

Date of issue: 2021-05-04 Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The SEM320X Universal Temperature Transmitter/Display is a HART 5 upwards (generic device) compatible universal temperature transmitter with display. It accepts RTD, Thermocouple, Potentiometer or millivolt input signals and converts them to the industry standard (4 to 20) mA transmission signal.

See Annex for full description and Conditions of Manufacture

SPECIFIC CONDITIONS OF USE: YES as shown below: See Annex for Specific Conditions of Use



Certificate No.: IECEx CML 20.0046X Page 4 of 4

Date of issue: 2021-05-04 Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above) Issue 1

1. Update of IECEx QAR to GB/CML/QAR21.0004

Annex:

Certificate Annex IECEx CML 20_0046X Issue 1.pdf

Annexe to: IECEx CML 20.0046X, Issue 0

Applicant: Status Instruments Ltd.

Apparatus: SEM320X Universal Temperature

Transmitter/Display



Description

The SEM320X Universal Temperature Transmitter/Display is a HART 5 upwards (generic device) compatible universal temperature transmitter with display. It accepts RTD, Thermocouple, Potentiometer or millivolt input signals and converts them to the industry standard (4 to 20) mA transmission signal.

The SEM320X Universal Temperature Transmitter/Display consists of polyurethane based potted main and display PCBs, housed in a polycarbonate and ABS sub-assembly. The sub-assembly will be fitted inside a separately certified aluminium or stainless-steel enclosure with or without a silicone RTV cemented glass windowed lid and nitrile O-rings.

When operating in the field, the equipment is to be powered only by an intrinsically safe supply. The equipment has the following parameters:

Ui = 30 Vdc

Ii = 100 mA

Pi = 750 mW

Ci = 0

Li = 0

Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification:

- i. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. The SEM320X Temperature Transmitter shall be provided with a separately certified ATEX/IECEx enclosure. The enclosure may be approved for any Zone provided it meets the following requirements, and a copy of the installation documents for the separately certified enclosure shall be provided with the equipment.
 - Suitable for an ambient temperature range of at least -40°C to +85°C, and if applicable, a service temperature of +100°C.
 - Has a ingress protection rating of at least IP54.
 - Does not have any electrostatic hazard warnings.
- iii. A copy of the instructions shall be supplied with the equipment.

Unit 1, Newport Business Park New Port Road Ellesmere Port CH65 4LZ

T +44 (0) 151 559 1160 E info@cmlex.com

www.cmlex.com





iv. Where the separately certified enclosure provided with the equipment contains, by mass, more than 10% in total of aluminium, magnesium, titanium and zirconium, the installer/user shall be made aware of this and instructions shall detail the specific conditions of use regards to protecting the enclosure from impact and friction.

Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

- i. The SEM320X Temperature Transmitter is only suitable for connection to Thermocouple(s), RTD temperature sensor(s) or slide wire resistance devices or other simple apparatus. They shall conform to the requirements for simple apparatus as defined in IEC 60079-11 clause 5.7 and shall meet the dielectric withstanding requirements of IEC 60079-11 clause 6.3.13. The insulation must be capable of withstanding an r.m.s a.c. test voltage of 2U + 1000V, a minimum of 1500V r.m.s, where U is the sum of the voltages of the intrinsically safe and the non-intrinsically safe circuit.
- ii. Connections to the separately certified enclosure shall be suitable for the protection concepts of the enclosure and maintain the minimum ingress protection rating of IP54.
- iii. When connected to sensors measuring temperatures within a process or location, the installer shall ensure the temperature transmitter module is not exposed to temperatures outside the ambient temperature range of -40°C to +85°C.
- iv. The SEM320X Temperature Transmitter may be fitted inside an enclosure having a material composition containing by mass more than 10% in total of aluminium, magnesium, titanium and zirconium. Where this is the case, the installation shall protect the enclosure from impacts and friction.
- v. The equipment shall only be configured by means of the USBX configurator, covered under EMT16ATEX0024X / IECEx EMT 16.0013X; connection shall be in the safe area only. Additionally, the SEM320X Temperature Transmitter may be configured in hazardous area via HART communication.

Components covered by Ex Certificates issued to older editions of Standards

None