



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx EMT 16.0009X Issue No: 0 Certificate history:
Issue No. 0 (2016-06-13)

Status: **Current** Page 1 of 3

Date of Issue: **2016-06-13**

Applicant: **Online Electronics Ltd.**
Online House,
266 Auchmill Road,
Aberdeen, AB21 9NB
United Kingdom

Equipment: **EMTx20 EM Transmitter Family, EMTx20X-AA1S, EMTx20X-AA2S,
EMTx20X-AA3S**

Optional accessory:

Type of Protection: **Flameproof**

Marking:
Ex db IIC Gb T6 Tamb -20°C to 51°C (depending on battery type)

*Approved for issue on behalf of the IECEx
Certification Body:*

Stephen Winsor

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Element Materials Technology
Unit 1 Pendle Place
Skelmersdale
West Lancashire
WN8 9PN
United Kingdom





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Manufacturer: **Online Electronics Ltd.**
Online House,
266 Auchmill Road,
Aberdeen, AB21 9NB
United Kingdom

Additional Manufacturing
location(s):

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 electrical apparatus 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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

*This Certificate **does not** indicate compliance with electrical 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/EMT/ExTR16.0011/00](#)

Quality Assessment Report:

[GB/TRC/QAR11.0002/04](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The EMTx20X range is comprised of flameproof pipeline pig monitoring transmitters housed in a stainless steel or titanium cylindrical enclosure. The equipment may be powered by 1, 2 or 3 x AA alkaline cells, the equipment range is broken down as shown below: EMTx20X-AA1S, EMTx20X-AA2S and EMTx20X-AA3S, where the digit 1,2 or 3 details the number of cells housed within the enclosure/enclosure size and the S specifies the cell type housed within (S=1.5V Standard). The permitted cells that may be used within the enclosure are detailed below:

Type L (Duracell ID1500), Type L (Duracell MN1500), Type L (Duracell MX1500), Type L (Energizer EN91)

The enclosure is comprised of a cylindrical housing and two M27x1.0 threaded end caps. The end caps may be one of the following: Standard, Bleedscrew, Magnetic or Pressure switch. The Bleedscrew end cap is identical to the standard end cap with an additional M6x1.0 threaded joint between the end cap lid and alloy bronze bleed screw/blanking element. The pressure switch end cap is constructed with an additional cylindrical joint in the end cap lid, between the alloy bronze piston, which is a push button used to activate the unit, and the end cap itself.

In end use the EMTx20X is completely housed within a carrier specifically designed for the type of pipe to be inspected.

Rating 4.5Vdc Max < 0.4W.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. Only complete sets of new and identical cells must be used.
2. Only the batteries listed in the Annex shall be used with the corresponding ambient temperature and TClass.
3. Batteries must be installed into the enclosure in accordance with the orientation detailed on the marking label.
4. Repair of flamepaths is not permitted by the end user.
5. Do not open when an explosive gas atmosphere may be present.
6. For enclosures manufactured from titanium, the equipment must be installed, such that ignition sources due to impact and friction sparks are excluded.
7. Bleed screw must be tightened to a torque of 4Nm to 8Nm.

Annex:

[Annex to IECEx EMT 16.0009X is 0.pdf](#)



Element Materials Technology,
Unit 1, Pendle Place,
Skelmersdale,
West Lancashire, WN8 9PN,
United Kingdom

Annex to IECEX Certificate of Conformity

IECEX EMT 16.0009X issue No.:0

“Special conditions of Use”: Permitted Batteries

1. Only the following permitted batteries shall be used with the corresponding ambient temperature and TClass :

Cell Type	T _{amb}	TClass
Duracell ID1500	-20°C to +50°C	T6
Duracell MN1500	-20°C to +50°C	T6
Duracell MX1500	-20°C to +50°C	T6
Energizer EN91	-18°C to +51°C	T6

“Special conditions for manufacture”:

1. Total maximum power dissipated in the equipment shall not exceed 0.4 Watts.

Routine tests:

1. None

Manufacturer’s Documents

Title:	Drawing No.:	Rev. Level:	Date:
EMTx20X ATEX IECEX File (29 pages)	EMTx20X ATEX IECEX File	A16	2016-06-13