1 EU - TYPE EXAMINATION CERTIFICATE

2 Product or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU – Annex III

3	EU - Type Examination Certificate No.:	**EMT16ATEX0011X (incorporating variations V1 to V2)**
4	Product:	**EMTx20X EM Transmitter Family: EMTx20X-AA1S, EMTx20X-AA2S, EMTx20X-AA3S**
5	Manufacturer:	**Online Electronics Limited**
6	Address:	**Online House, Blackburn Business Park, Woodburn Road, Aberdeen, AB21 0PS, United Kingdom**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Element Materials Technology, Notified Body number 2812, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports **TRA-030224-33-00A & TRA-037039-33-00A.**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013 EN 60079-1:2014

Except in respect of those requirements listed at section 18 of the schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of this product shall include the following:

Ex II 2 G Ex db IIC Gb T6 Tamb -20°C to 51°C (depending on battery type)

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the Element Materials Technology Ex Certification Scheme.

S P Winsor, Certification Manager

Issue date: 2019-11-01

Voorerf 18, 4824 GN Breda, Netherlands
Element Materials Technology Rotterdam B.V.
Registered in the Netherlands. Registered Office: PO Box 6854, 4802 HW, Breda, Netherlands
Company Reg No. 24170257

13 SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

14 EMT16ATEX0011X (incorporating variations V1 to V2)

15 Description of Product

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.

16 Test report No. (associated with this certificate issue): None.

17 Specific Conditions of Use

1. Only complete sets of new and identical cells must be used.
2. 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

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.

18 Essential Health and Safety Requirements (Directive Annex II)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
None	None

19 Drawings and Documents

The list of controlled technical documentation is given in Appendix A to this schedule.

20 Routine Tests

None.

21 Specific Conditions for Manufacture

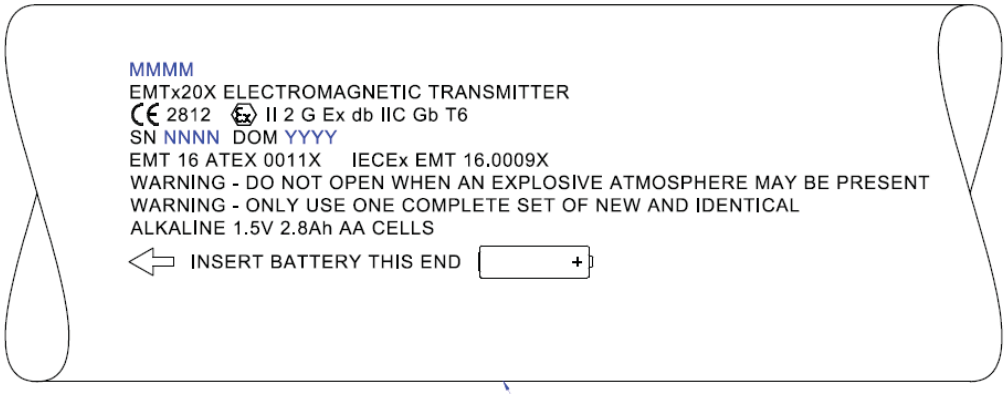
Total maximum power dissipated in the equipment shall not exceed 0.4Watts.

22 Photographs

Fully assembled example.

Available in Three length sizes.

23 Details of Markings



1. MARKINGS MUST BE ENGRAVED OR ETCHED.
2. MMMM SHOWS LATEST NAME AND ADDRESS OF MANUFACTURER AS PER THE CERTIFICATION E.G. ONLINE ELECTRONICS LTD, AB21 0PS, UK.
2. NNNN SUFFIX TO S/N SHOWS THE SERIAL NUMBER OF THE UNIT.
3. YYYY SUFFIX TO DOM SHOWS THE YEAR OF MANUFACTURE.
4. ADDITIONAL NON-ATEX MARKINGS MAY BE INCLUDED

24 Details of Variations to this Certificate

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following variations:

- Issue 2 – to include corrected marking plate and updated drawing list.
- Variation V1 – Renaming of technical document file & update of new address to all documentation.
- Variation V2 - This certificate was originally issued by Notified Body number 0891 under Directive 2014/34/EU. The technical file has been transferred to Element Notified Body number 2812 without further assessment or evaluation.

25 Notes to CE marking

In respect of CE Marking, Element Materials Technology accepts no responsibility for the compliance of the product against all applicable Directives in all applications.

26 Notes to this certificate

Element Materials Technology certification reference: NR-ONLQ-0009.

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Notified Body number 2812 is the designation for Element Materials Technology Rotterdam BV.

27 Conditions for the validity of this certificate

This certificate remains valid for so long as:

(i) The equipment listed in section 4 is manufactured in accordance with the documents listed in Appendix A of this certificate.

(ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Health and Safety Requirements of Annex II of Directive 2014/34/EU and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

EMT16ATEX0011X (incorporating variations V1 to V2)

APPENDIX A - TECHNICAL DOCUMENTS

Title:	Drawing No.:	Rev. Level:	Date:
EMTx20_X001 ATEX IECEx File (30 Pages)	EMTx20_X001	B00	2019-10-16
1V5 Safety Instructions	EMTx20_X002	B00	2019-10-16
1V5 Markings	EMTx20_X009	B00	2019-10-16