EU TYPE-EXAMINATION CERTIFICATE

1. **EU type-examination Certificate (Module B)**

2. **Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)**

3. **EU type examination certificate Nr** **ITS17ATEX101945X R.0**

4. **Product:** Universal Transmitter (LXT-380 Transmitter and SP3X Sensor)

5. **Manufacturer:** Teledyne Analytical Instruments **Applicant:** Teledyne Analytical Instruments

6. **Address:** 16830 Chestnut Street, City Of Industry, CA 91748; USA **Address:** 16830 Chestnut Street, City Of Industry, CA 91748; USA

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

8. INTERTEK ITALIA S.p.A., Notified Body n° 2575 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and Council of the 26 February 2014, certifies that the equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.

   The examination and tests results are recorded in confidential technical evaluation Intertek Report Nr. 105024368CRT-004

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 Incorporating corrigendum January 2020, EN 60079-1:2014 Incorporating corrigenda September 2018 and June 2020, EN 60079-11:2012 Incorporating corrigenda January 2012 and November 2014, and EN 60079-18:2015+A1:2017 except in respect of those requirements referred to at item 16 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 the product shall include the following:

    II 2 G Ex db mb [ia IIC Ga] IIC T4 Gb – For Main Flameproof Enclosure
    II 1 G Ex ia IIC T4 Ga – For Sensor Assembly
    Tamb: -20°C ÷ +85°C

07 September 2022

Certificate issue date

Todd L. Relyea
Certification Officer
Intertek Italia S.p.A. (NB 2575)

PDR N° 277B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC Mutual Recognition Agreements

This certificate has been issued by Intertek Italia S.p.A. NB 2575 on transfer from Intertek Testing & Certification Ltd. (NB 0359) using the same issued original certificate number.

SCHEDULE

EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS17ATEX101945X R.0

13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The Model LXT-380 transmitter is a single or dual channel, intelligent, multi-parameter transmitter designed for the online continuous measurement of pH, ORP, pION, dissolved oxygen, conductivity, resistivity and turbidity in a hazardous industrial environment.

The Model LXT-380 transmitter can be loop powered, 24 VDC powered or 100-240 VAC line powered. The standard configuration has a 4-20 mA output and a RS485 serial communication port with MODBUS®RTU output. A HART® communication version (single channel version only) is also available. Alarm relays are optionally available on either line powered transmitter.

Transmitter consists of a flameproof enclosure that holds the electronics with a barrier gland for a seal for the IS outputs. The enclosure has two other openings, one that is to be supplied by the manufacture with a certified blanking plug and the other which is to be supplied by the end user with a suitably rated cable gland or seal for the electrical connection.

SP3X Sensor Type:

mV Input Sensor per document (BOM) 2801900-1
DO Input Sensor per document (BOM) 2801900-2
Free Chlorine Sensor per document (BOM) 2801900-3
mV Diag Sensor per document (BOM) 2801900-4
Free CLO2 Sensor per document (BOM) 2801900-5
Conductivity Sensor per document (BOM) 2801910-1
Resistivity Sensor per document (BOM) 2801915-1

CE Marking shall be accompanied by the identification number of the Notified Body responsible for surveillance of production.

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
Final Assembly Model X80	1100000	B	06/08/15
Model X80 Instruction Manual	4100001	E	9/05/2017
PCB SENSOR ASSY SMT MV INPUT	2801900-1	F	08/23/2017
PCB SENSOR ASSY SMT DO INPUT	2801900-2	F	08/23/2017
PCB SENSOR ASSY SMT FREE CHLORINE	2801900-3	E	08/23/2017
PCB SENSOR ASSY SMT MV DIAG	2801900-4	D	08/23/2017
PCB SENSOR ASSY SMT CLO2	2801900-5	D	08/23/2017
PCB SENSOR ASSY SMT CONDUCTIVITY	2801910-1	D	08/23/2017
PCB SENSOR ASSY SMT RESISTIVITY	2801915-1	D	08/23/2017
BOM, X80 SMT Sensor FCA INPUT	2801900-3	E	23AUG17
BOM, X80 SMT Conductivity Sensor	2801910-1	D	23AUG17
SENSOR, mV INPUT, DIGITAL OUTPUT	1800200	B	17MAR15

SCHEDULE

EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS17ATEX101945X R.0

TITLE	DOCUMENT Nr	LEVEL	DATE
SENSOR, CONTACTING CONDUCTIVITY	1800210	C	19NOV14
Schematic, X80 Display Board	1800240	B	17MAR15
Schematic, X80 Sensor Board	9240410	B	29JUN17
Stencil S88/SP3X Sensor	2801900-3	E	23AUG17
STENCIL S88 Sensor ATEX/CE APPROVAL	9240410	B	06/29/17
Label X80 ATEX Approval SS	9240021	D	09/05/2017
Control Drawing X80 ATEX/IECEx	1700004	E	09/05/2017
LABEL LXT-380 ATEX APPROVAL	T9240021	E	09/07/2017
STENCIL SP3X SENSOR ATEX/CE APPROVALS	T9240410	B	09/07/2017
STENCIL SP3X SENSOR ATEX/CE TELEDYNE	T9240411	A	12/07/2016
MODEL LXT-380 INSTRUCTION MANUAL	T4100001	D	09/07/2017
APPENDIX X HAZARDOUS LOCATION INFORMATION	T4100001.X	D	09/07/2017
Final Assembly Model X80	1100000	C	05/10/2017
Control Drawing X80 ATEX/IECEx (3 shts)	1700004	F	09/23/2020
Model X80 Hazloc Appendix	4100001.X	F	09/16/2020
PCB SENSOR ASSY SMT MV INPUT	2801900-1	F	08/23/2017
PCB SENSOR ASSY SMT DO INPUT	2801900-2	F	08/23/2017
PCB SENSOR ASSY SMT FREE CHLORINE	2801900-3	E	08/23/2017
PCB SENSOR ASSY SMT MV DIAG	2801900-4	D	08/23/2017
PCB SENSOR ASSY SMT CLO2	2801900-5	D	08/23/2017
PCB SENSOR ASSY SMT CONDUCTIVITY	2801910-1	E	09/15/2020
PCB SENSOR ASSY SMT RESISTIVITY	2801915-1	E	09/15/2020
SENSOR, mV INPUT, DIGITAL OUTPUT	1801900	E	07/19/2017
SENSOR, CONTACTING CONDUCTIVITY	1801910	C	07/19/2017
Schematic, X80 Display Board	1800200	B	17MAR15
Schematic, X80 Sensor Board	1800210	D	24OCT16
Schematic, X80Relay/Conn. Board	1800240	B	17MAR15
STENCIL S88 SENSOR ATEX/CE APPROVALS	9240410	B	06/29/2017
STENCIL, S88 SENSOR ATEX/IECEx	9240411	A	12/07/2016
Label x80 ATEX Approval SS	9240021	D	09/05/2017
*LABEL LXT-380 ATEX APPROVAL	T9240021	F	5/31/2022
STENCIL SP3X SENSOR ATEX/CE APPROVALS	T9240410	C	5/31/2022

SCHEDULE

EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS17ATEX101945X R.0

TITLE	DOCUMENT Nr	LEVEL	DATE
*APPENDIX X HAZARDOUS LOCATION INFORMATION	T4100001.X	F	3/29/2022

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.

15. **SPECIFIC CONDITIONS OF USE**

- The end user is responsible for providing a suitably rated cable gland/seal for the electrical connection and remaining openings to the flameproof enclosure.
- The end user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
- Flame-paths are not intended to be modified.

16. **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS**

The relevant Essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 105024368CRT-004 dated 30 AUGUST 2022

17. **ROUTINE (FACTORY) TESTS**

- N / A

SCHEDULE

EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS17ATEX101945X R.0

18. **DETAIL OF CERTIFICATE CHANGES**

R.0

Initial release by Intertek Italia S.p.A. NB 2575 based on the assessment performed on August 2022 and on the certificate legal ownership transferred from Intertek Testing & Certification Ltd. (NB 0359); the same issued original certificate number is used.

Performed under Intertek Report No. 105024368CRT-004

This variation comprises the following changes to the equipment:

1. Update Standards
2. Update Markings / Instructions (Change ATEX NB #)

The following drawings have changed as part of this variation:

TITLE:	DRAWING NO.:	REV. LEVEL:	DATE:
*LABEL LXT-380 ATEX APPROVAL	T9240021	F	5/31/2022
STENCIL SP3X SENSOR ATEX/CE APPROVALS	T9240410	C	5/31/2022
*APPENDIX X HAZARDOUS LOCATION INFORMATION	T4100001.X	F	3/29/2022