

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 ITS 15.0031X Issue No: 0 Certificate history:
Issue No. 0 (2015-08-27)

Status: **Current** Page 1 of 3

Date of Issue: **2015-08-27**

Applicant: **PSM Instrumentation Limited**
Unit 3 Burrell Road
Haywards Heath
West Sussex
RH16 1TW
United Kingdom

Electrical Apparatus: **ICT 1000/X Series Intelligent Pressure / Temperature Transmitter**
Optional accessory:

Type of Protection: **Intrinsic Safety Ex ia**

Marking:
Ex ia IIC T4 Ga
-20 °C ≤ Ta ≤ 80 °C
IECEX ITS 15.0031X


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

A. Dickinson

Position:

Certification Officer

*Signature:
(for printed version)*


27 August 2015

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:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom





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Manufacturer: **PSM Instrumentation Limited**
Unit 3, Burrell Road
Haywards Heath
West Sussex
RH16 1TW
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 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*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/ITS/ExTR15.0030/00](#)

Quality Assessment Report:

[GB/ITS/QAR15.0016/00](#)



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Issue No: 0

Date of Issue: 2015-08-27

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The PSM Instrumentation Limited ICT 1000/X Series are dual mode pressure and temperature transmitters designed for hydrostatic pressure and process temperature measurement.

The ICT 1000/X electronics are housed within a submersible stainless steel cylindrical housing. A factory fitted cable is attached at one end through a cable gland and a process connection is provided at the other.

Assembly of the housing is completed by welding. A seal is maintained at the face of the ceramic transmitter element to keep the process fluid out of the electronics housing. The supply cable includes a small diameter tube to provide an atmospheric reference for the transducer. When the cable is terminated, the vent tube shall be appropriately terminated to vent to atmosphere.

Intrinsic safety is assured by the use of limitation of voltage, current and power and limitation of capacitance and inductance.

The ICT transmitter has a 4 wire connection, one pair providing power and / or 4-20mA current loop signal, the other twisted pair providing RS485 data communication.

The equipment is supplied by two intrinsically safe barriers, one for the power lines and one for the communications lines. The total combined input parameters are:

Ui: 28V dc

Ii: 150mA

Pi: 0.8W

Ci: 49nF (at 28V) and 948nF (at 11.8V)

Li: 0

CONDITIONS OF CERTIFICATION: YES as shown below:

All transmitters must be supplied through one set of 28V and 9V barriers or each transmitter must have its own set of barriers. It is not permitted to use separate supply barriers and one communication barrier.

The installer and user must exercise caution to avoid the accumulation of electrostatic charge on non-metallic parts of this equipment.

Annex:

[Annex to IECEx ITS 15.0031 Issue 0.pdf](#)



Schedule of Drawings for Certificate: IECEx ITS 15.0031X Issue 0

Manufacturer:

PSM Instrumentation Limited
 Unit 3 Burrell Road
 Haywards Heath
 West Sussex
 RH16 1TW

| Title: | Drawing No.: | Rev. Level: | Date: |
|---|---------------------|--------------------|--------------|
| ICT 2.53 (components list) | P95007-1000-BOM | E | 29/05/2014 |
| iCT 2.53 BOARD1:Capacitance-to Digital Converter | P95021-1000-CD | C | 9 June 2014 |
| iCT 2.53 BOARD 2: Processor / RS485 Circuit | P95021-1000-CD | C | 9 June 2014 |
| iCT 2.53 BOARD3: 4-20mA Circuit | P95021-1000-CD | C | 9 June 2014 |
| iCT 2.53 BOARD4: Voltage Regulator | P95021-1000-CD | C | 9 June 2014 |
| iCT 2.53 BOARD5: Safety / Protection Circuit | P95021-1000-CD | C | 9 June 2014 |
| iCT Main and interconnect boards outline | P95022-1000-GA | B | 20-11-13 |
| ICT Board 1 Bottom Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 1 Top Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 2 Top Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 2 Bottom Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 3 Top Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 3 Bottom Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 4 Top Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 4 Bottom Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 5 Top Screen | P95028-1000-AW | C | 24/06/14 |
| ICT Board 5 Bottom Screen | P95028-1000-AW | C | 24/06/14 |
| iCT Ceramic Sensor Pinout Details | P95029-1000-DT | B | 20-11-13 |
| iCT PCB N ^o 1 connection to Ceramic Sensor | P95030-1000-DT | B | 20-11-13 |
| ICT Complete Parts List | P95031-1000-BOM | B | 20/11/2013 |
| ICT IECEx Exploded drawing \ parts List | P95048-1000-GA | A | 30-06-15 |
| iCT IECEx LABELS | P95049-1000-DT | A | 02-07-15 |
| ARTWORK FOR ICT IECEx LABELS | P95053-1000-AW | A | 02-07-15 |
| CABLE IDENT SLEEVE | P95059-1000-DT | A | 02-07-15 |
| iCT IECEx Labels Fitting Position | P96067-1000-GA | A | 20-07-15 |

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