



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx ITS 18.0012X**

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Certificate history:

Status: **Current**

Issue No: 2

[Issue 1 \(2024-06-05\)](#)

[Issue 0 \(2018-05-21\)](#)

Date of Issue: 2025-09-17

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

Equipment: **APT 500, APT 590, SPT 900 and SPT 990 series Pressure Transmitters**

Optional accessory:

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

Marking: Ex ia IIC T4 Ga
-30°C ≤ Ta ≤ +85°C
IECEx ITS 18.0012X

Approved for issue on behalf of the IECEx
Certification Body:

R J Tunncliffe

Position:

Certification Officer

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

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

intertek



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

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

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

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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 Reports:

[GB/ITS/ExTR18.0013/00](#)

[GB/ITS/ExTR18.0013/01](#)

[GB/ITS/ExTR18.0013/02](#)

Quality Assessment Report:

[GB/ITS/QAR15.0016/06](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The APT 500, APT 590, SPT 900 and SPT990 Series level transmitters are designed for monitoring liquid levels and pressures, based on a micro-electro-mechanical (MEMS) piezo-resistive cell.

The pressure measurement cell is isolated from the process by a diaphragm with an internal fluid fill transmitting the process pressure to it. Temperature compensation and zero correction are applied during manufacture by laser trimming of compensation resistors.

The output from the measurement cell is converted by an internal circuit to a 4-20mA signal which is scaled to the user requirements.

The sensor is fully encapsulated internally and may be manufactured from a choice of construction materials for the wetted parts.

The APT 500 and SPT 900 are identical in mechanical and electrical construction.

The APT 590 and SPT 990 are identical in mechanical and electrical construction and differ from APT 500 and SPT 900 in electrical construction only.

The model code is defined as follows:

APT 500/I, SPT 900/I, APT 590/I and SPT 990/I – Intrinsically Safe, ATEX certification.

APT 500/X, SPT 900/X, APT 590/X or SPT 990/X – Intrinsically Safe, IECEx certification.

The model code may be followed by other alpha-numeric characters, to define other features of the product.

Entity Parameters for APT 500 and SPT 900:

Ui = 28V
Ii = 93 mA
Pi = 0.7W
Ci = 12nF
Li=0

Entity Parameters for APT 590 and SPT 990:

Ui = 28V
Ii = 93 mA
Pi = 0.7W
Ci = 27.5nF
Li = 705μH

SPECIFIC CONDITIONS OF USE: YES as shown below:

Non-metallic parts on the exterior of the pressure transmitter may present an electrostatic charging hazard. Refer to warning marking and the manufacturer's instructions for further guidance.

Where external parts of the pressure transmitter incorporate light metal components (i.e. in excess of 10 % in total of aluminium, magnesium, titanium and zirconium), the sensor must be protected from impact such that impact / friction sparks cannot occur, taking into account rare malfunction.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1:

- Addition of alternative coding (SPT 900) for existing models.
- Update to documentation.

Issue 2:

- Addition of new models APT 590 and SPT 990 with revised electrical construction.
- Addition of input parameters for APT 590 and SPT 990.
- Update to documentation.

Annex:

[Annex to IECEx IECEx ITS 18.0012X issue 2.pdf](#)



Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ITS 18.0012X	Issue No. 2
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Installation Operation & Maintenance Instruction Manual APT 500 Series	MAN 095	C	02/05/2018
Installation Operation & Maintenance Instruction Manual SPT 900 Series	MAN 099	A	Aug 2023
*Installation Operation & Maintenance Instruction Manual APT 590 Series	MAN 101	B	July 2025
*Installation Operation & Maintenance Instruction Manual APT 990 Series	MAN 102	B	July 2025
*APT Outline	P19000-APT-GA	B	29/07/2025
APT Parts/Exploded View	P19001-APT-GA	A	31/06/2017
*APT 500 Series Top Level BOM	P19002-APT-BOM	C	30/07/2025
APT Main Board	P19003-APT-CD	C	18/04/2018
APT 500 Series configurable 4-20mA Transmitter	P19004-APT-BOM	L	18/04/2018
APT Sensor Specification	P19011-APT-GA	A	31/06/2017
APT Board Screen Printing (5 pages)	P19012-APT-GA	B	18/04/2018
*APT500 ATEX, IECEx & UKCA Labels (page 1 of 4)	P19013-APT-DT	I	10/07/2025
*SPT900 ATEX, IECEx & UKCA Labels (page 2 of 4)	P19013-APT-DT	I	10/07/2025
*APT590/SPT990 ATEX & IECEx Labels (page 3 of 4)	P19013-APT-DT	I	10/07/2025
APT transmitter typical connection head	P19018-APT-GA	A	01/05/2018
APT transmitter typical connection head	P19019-APT-GA	A	01/05/2018
APT Board Clearance	P19020-APT-GA	A	01/03/2018
APT Local and Remote Termination Options	P19024-APT-GA	A	11/04/2018
*Externally Mounted Installation Guidance For I.S. Installations	P19081-APT-DT	B	29/07/2025
*APT590 & SPT990 Schematic	P19083-APT-CD	A	29/07/2025
*APT590 & SPT990 Screen Printing & Layout Drawing	P19085-APT-DT	A	29/07/2025
*SPT590 & APT990 Board Clearance	P19086-APT-GA	A	29/07/2025
*APT 590 & SPT990 Series Top level BOM	P19087-APT-BOM	A	30/07/2025

Note: An * is included before the title of documents that are new or revised.