



1. EC-TYPE EXAMINATION CERTIFICATE

2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3. EC-Type Examination Certificate Number: **ITS09ATEX26414X**

4. Equipment or Protective System: **RFM Series IS Interface**

5. Manufacturer: **PSM INSTRUMENTATION LTD.**

6. Address: **Unit 3, Burrell Road
Haywards Heath
West Sussex
RH16 1TW**

7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8. Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this 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 systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Intertek Report Ref 08035266 Issue 1 dated September 2010.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2009, EN 60079-11:2007 and EN 60079-26:2007 except in respect of those requirements referred to at item 18 of the Schedule.

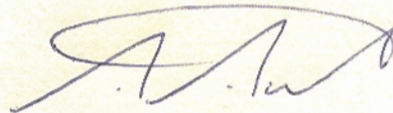
10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11. This EC Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12. The marking of the equipment or protective system shall include the following:-



II (1) G Ex [Ia Ga] IIB or IIC
Tamb = -20°C to +50°C



A T Austin
Certification Officer
8 September 2010

Intertek Testing & Certification Limited
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13. SCHEDULE

14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX26414X

15. DESCRIPTION OF EQUIPMENT OR PROTECTIVE SYSTEM

The PSM Instrumentation Ltd RFM IS Interface is an apparatus, mounted in the non-hazardous area, supplying power and data to a number of PSM Instrumentation Ltd iCT 1000 Series dual mode pressure and temperature transmitters located in the hazardous area. Each iCT Series transmitter is connected to the RFM IS Interface through an RFM Termination Unit, which is separately certified.

The RFM IS Interface electronics are housed within a metallic enclosure and is comprised of two printed circuit boards.

One printed circuit board performs the voltage and current limitation, the other provides termination facilities, by means of screw terminal blocks.

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

The RFM is supplied in 2 versions with differing output currents to cater for different Gas Groups.

The Intrinsic Safety Output Parameters are as follows:

IIC Gas Group

Um = 250 V

Uo	14.8V
Io	0.92A
Lo	3.212W
Co	0.61µF
Po	0.02mH
Lo/Ro	4.6µH/Ω

IIB Gas Group

Um = 250 V

Uo	14.8V
Io	1.414A
Lo	4.842W
Co	3.76µF
Po	0.06mH
Lo/Ro	20µH/Ω

Data (Gas Group IIB & IIC)

Um = 250 V

Uo	5.9V
Io	84 mA (both data lines combined)

Notes: Lo, Co and Po are calculated based on the combination of the Power and Data outputs. Main power Io figure includes Io from the data channels.

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16. REPORT NUMBER

Intertek Report Ref 08035266 Issue 1 dated September 2010.

17. SPECIAL CONDITIONS FOR SAFE USE

The IS Earth connection within the RFM Interface Unit shall be connected to a dedicated IS Earth or to the Equipotential Bonding System, which shall extend over the entire area of the installation.

Wire links LK2, LK3, LK4 and LK5 must be removed from the baseboard PCB.

18. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSR'S)

The relevant EHSR's have been identified and assessed in Intertek Report Ref 08035266 Issue 1 dated September 2010.

19. DRAWINGS

Number	Issue	Date	Description
P96000-RFM-GA	A	01-04-08	RFM Parts List Exploded View
P96012-RFM-GA	A	01-04-08	RFM Deck Mount Parts List Exploded View
P96013-RFM-DT	A	02-11-06	RFM Standard Enclosure
P96014-RFM-DT	A	02-09-08	RFM Deck Mount Enclosure
P96015-RFM-GA	A	01-04-08	Barrier Module Outline
P96016-RFM-GA	A	01-04-08	Termination Module Outline
P96018-RFM-DT	C	30-03-09	RFM Mounting Bracket
P96001-RFMISR-BOM	B	25-02-2010	ISR Barrier Module
P96019-RFM-BOM	A	06-03-2008	Termination Module
P96010-RFM-CD	A	28-09-2007	RFM Barrier Module (2 Sheets)
P96011-RFM-CD	A	28-09-2007	RFM BaseBoard
P96017-RFM-DT	A	20-05-08	RFM Information Label
P96020-RFM-DT	D	09-06-10	ATEX Marking Labels
P96021-RFM-AW	A	20-05-08	RFM Information Label
P96022-RFM-AW	C	07-06-10	ATEX Marking Labels
I6293	-	01-06-2010	PSM Sensors Barrier Module (5 sheets)
I6267	-	08-06-2010	PSM Sensors RFM Baseboard (3 Sheets)

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