



Marine &amp; Offshore

Certificate number: 23667/B0 BV

File number: AP 4190

Product code: 3741H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**PSM INSTRUMENTATION LTD**

Haywards Heath - UNITED KINGDOM

*for the type of product*

**LEVEL TRANSMITTERS**

Type: iCT Transmitter and RFM Barrier Module

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships.

EC Code: 31BS

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 07 Jul 2022**

**For Bureau Veritas Marine & Offshore,**

At BV LONDON, on 07 Jul 2017,

Spencer Yule



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

- Product model or type designation :  
**iCT 1000 Series & RFM Series**

- Product description:

iCT 1000 Series (Intelligent Process Transmitter) converts a non-electric quantity to a process-relevant electrical signal.  
RFM Series (Intrinsically safe barrier) limits the supply to the iCT or other devices and allowable current to be drawn.

#### 1.1 - Technical Specification:

##### **iCT 1000 Series:**

Power Supply : 8 - 30Vdc  
Range : -10mBar - 20 Bar  
Output : 4-20mA / Serial Communication  
Sensing Element : Ceramic Measurement Cell / Temperature Sensor / Integral Electronics  
Body Construction : Fusion Welded 316 Stainless Steel  
Operating Temperature : -20°C to +80°C  
IP Rating : IP68  
Intrinsic Safety : Ex ia IIC T4 Ga

##### **RFM Series:**

Power Supply : 15 - 35Vdc  
Output : 4-20mA / Serial Communications / Voltage Conversion  
Construction : Cast Aluminium or Deck Mount option Carbon Steel  
IP Rating : IP67  
Zener Barrier : Ex ia IIB or IIC T4 Ga

### 2. DOCUMENTS AND DRAWINGS:

Documents:

AP0804 Product Explanation and Specification Document Ref: APO804 RevA dated 12/04/2011.

Drawings:

ICT/RFM Type Approval Testing N°AP0801 dated 21.01.2008.  
iCT Exploded drawing \ Parts List N°AP0802 dated 20.08.2002.  
iCT Outline drawing N°AP0803 dated 20.08.2002.  
RFM Exploded drawing \ Parts Lists N°AP0806 dated 01.04.2008.  
RFMDeck Mount Expld drawing \ Parts Lists N°AP0807 dated 01.04.2008.

### 3. TEST REPORTS:

#### **PSM Instrumentation Ltd:**

- Report EMC001 Issue 4 dated

#### **Environmental Test Laboratory of Mariner Systems Ltd:**

- Salt Mist Test N°TL1203 dated June 2008.  
- Environmental Tests N°1203 dated May 2008.

### 4. APPLICATION / LIMITATION:

4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**

4.3 - BUREAU VERITAS Environmental Category, **EC Code: 31BS**

4.4 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.

4.5 - The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.

4.6 - Ex-certification is not covered by this certificate, Applications in hazardous areas are to be approved in each case according to the Rules and Conditions for Safe Use specified in a valid Ex-Certificate issued by a Notified or Recognised Certification Body.

**5. PRODUCTION SURVEY REQUIREMENTS:**

5.1 - The above products are to be supplied by **PSM Instrumentation Ltd** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **PSM Instrumentation Ltd** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - **PSM Instrumentation Ltd** has declared to Bureau Veritas the following production site(s):

**PSM Instrumentation Ltd - UK  
Burrell Road  
Haywards Heath, West Sussex  
UNITED KINGDOM**

**6. MARKING OF PRODUCT:**

6.1 - Trade name,

6.2 - Date of manufacture and serial number,

6.3 - Equipment type number or model identification under which it was type-tested,

6.4 - Ex marking, as relevant.

**7. OTHERS:**

7.1 - It is **PSM Instrumentation Ltd - UK** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No. 23667/A0 BV issued on 2 Aug 2011 by the Society.

**\*\*\* END OF CERTIFICATE \*\*\***