

# 1 EC TYPE EXAMINATION CERTIFICATE

2 Equipment or protective system intended for use in potentially explosive atmospheres –  
Directive 94/9/EC – Annex III

3 EC Type Examination Certificate No.: **TRL05ATEX21087X (incorporating variations V1 to V3)**

4 Equipment: **DM700X/I, DM700HM/XI and HBS160001X Loop-Powered Digital Process Indicator**

5 Manufacturer: **Status Instruments Ltd.,**

6 Address: **Status Business Park, Gannaway Lane, Tewkesbury, GL20 8FD,  
United Kingdom**

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

8 Element Materials Technology, Notified Body number 0891 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential report **XU1271/6126, XU1606/8532 & TRA-006930-33-00A.**

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in section 17 of the schedule to this certificate, has been assured by compliance with:

**EN50014:1997/A2:1999**


**EN50020:2002**

**EN50284:1999**

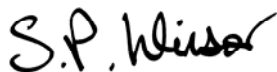
10 If the sign “X” is placed after the certificate number then this indicates that the equipment or protective system is subject to special conditions of safe use specified in the schedule to this certificate.

11 This EC-Type Examination certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

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

 **II 1 G EEx ia IIC T4: Tamb = -20°C to +75°C  
T5: Tamb = -20°C to +40°C**

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the Element Materials Technology Ex Certification Scheme.



S P Winsor, Certification Manager

Issue date: 2016-01-21

CSF355 1.0

13 **SCHEDULE TO EC TYPE EXAMINATION CERTIFICATE**

14 **TRL05ATEX21087X (incorporating variations V1 to V3)**

15 **General description of equipment or protective system included within the scope of this certificate**

The DM700X/I, DM700HM/XI and HBS16001X are a loop-powered digital process indicator with a 4-digit 7-segment red LED display. The DM700X/I, DM700HM/XI & HBS16001X accept a 4-20mA input signal and display it as an associated process variable.

They are constructed of a single Printed Circuit Board containing the LED display and associated circuitry. The DM700X/I, DM700HM/XI and HBS16001X are configurable and the settings are selectable by the use of three push-button keys located on the rear of the display. The entire PCB assembly is sealed into a cap that fits directly onto a plastic connecting heads. The enclosure for the DM700X/I has a minimum IP rating of IP67. The DM700HM/XI and HBS16001X do not have enclosures and are designed to be incorporated into a suitable ATEX enclosure.

The DM700HM/XI and HBS16001X differ from the previously approved DM700X/I in that these additional models, the cap has the lip removed, two nylon-66 pillars are attached and the electrical connector is removed and wires are inserted instead.

***A list of controlled Manufacturer's Documents is given in Appendix A to this schedule.***

16 **Test report No. (associated with this certificate issue):** XU1271/6126, XU1606/8532 & TRA-006930-33-00A.

17 **Essential health and safety requirements (Directive Annex II)**

Covered by application of the standards listed in section 9 of this certificate and the assessment conducted in the test report listed in section 16 of this certificate.

18 **“Special Conditions of Safe Use” for Ex Equipment, if any:**

1. Label stating 'Warning Electrostatic Hazard Do Not Charge by Rubbing or Cleaning with Solvents'.
2. The equipment must be housed in either the SCH4 series of enclosures (DM700X/I only) or SCH50 series of enclosures (DM700HM/XI and HBS16001X only) or any metal enclosure offering protection to IP67. The enclosure must be suitable for the atmosphere and environment in which it is installed.
3. The equipment must not be configured in the hazardous area, only in the safe area.
4. The equipment must be supplied by an ATEX intrinsically safe barrier with compatible parameters.

19 **“Routine tests”, if any:**

None.

20 **“Special conditions for manufacture”, if any:**

1. Manufacturer shall ship instructions that meet the requirements of directive 94/9/EC Annex II, clause 1.0.6 and clause 28 of EN50014:1997/A2:1999 with the equipment. Manufacturer shall make available translations of instructions into other European community languages when requested.
2. Manufacturer shall ensure there is a layer of casting compound between the surface of the LED display and the enclosure.

## CONTINUATION OF SCHEDULE TO CERTIFICATE TRL05ATEX21087X V3

### 21 Other information, if any:

None.

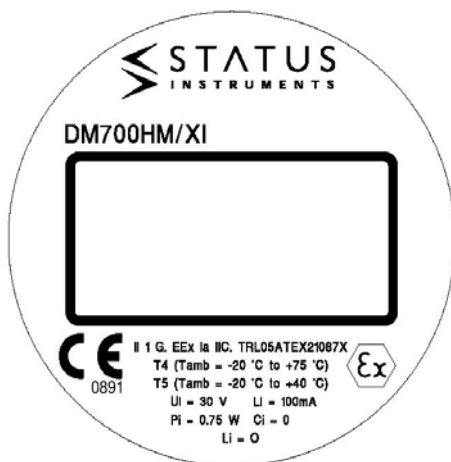
### 22 Photographs



### 23 Details of markings

DM700HM/XI label.

HBS 16001X label



### 24 Details of variations to this certificate

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following variations:

- Variation V1- This variation incorporates changes to the equipment which do not affect the previous technical assessment. The following changes apply: The addition of types named DM700HM/XI and HBS160001X. These are identical to the DM700XI except that the cap has the lip removed, two nylon-66 pillars are attached and the electrical connector is removed and wires are inserted instead.
- Variation V2 – Drawings addendum plus removal of reference to SCH15 enclosure.
- Variation V3- Change to drawing S4372-01-02 CN5065. Machine BASE dimension changed from 21mm to 19mm

25 **Notes to CE marking**

In respect of CE Marking, Element Materials Technology accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

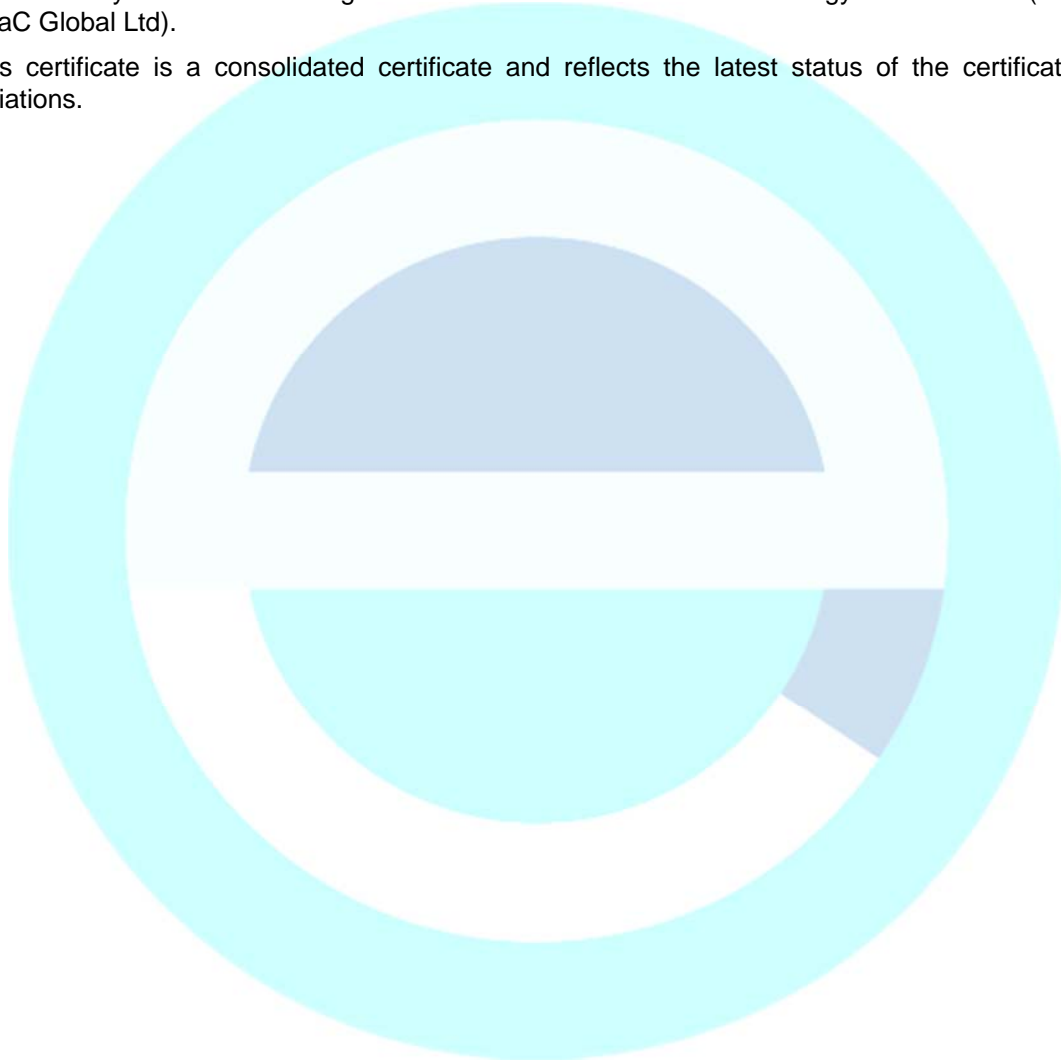
26 **Notes to this certificate**

Element Materials Technology certification reference: **TRA-030262-32-00**.

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Notified Body 0891 is the designation for Element Materials Technology Warwick Ltd (formerly known as TRaC Global Ltd).

This certificate is a consolidated certificate and reflects the latest status of the certification, including all variations.



CONTINUATION OF SCHEDULE TO CERTIFICATE TRL05ATEX21087X V3

**APPENDIX A - LIST OF CONTROLLED MANUFACTURER'S DOCUMENTS**

Title:	Drawing No.:	Rev. Level:	Date:
SCH4 cap retaining nut	S1779	6	2004-03-14
SCH4 low profile cap	S1780	6	2004-03-14
Body single side entry port	S1782	11	2007-10-10
Body double sided entry ports	S1783	11	2007-10-10
Certification Drawing Circuit Diagram	S4225-01-01 CN4244 DM700XI Certification Drawing Circuit Diagram	1	2004-08-17
DM700XI certification drawing GA	S4228	3	2008-12-18
DM700XI PCB Detail Drawing	S4233-01-02 CN4244 DM700XI PCB Detail Drawing	2	2005-10-20
DM700XI Certification Drawing Item List	S4226-01-02 CN4244 DM700XI Cert_Dwg_Item_List	2	2004-08-16
DM700XI Certification Sub-Assembly	S4227-01-01 CN4244 DM700XI Cert_Sub_Assy	1	2004-03-22
DM700XI Certification Drawing Labels	S4229-01-04 CN4244 DM700XI Cert_Dwg_Labels	4	2005-11-08
DM700/I DM700X/I Loop-Powered Digital Process Indicator (Instruction Sheet)	52-314-2396-02	1	**
DM700HM/XI Product Label	S4615-01-01 CN4610	1	2008-04-14
HBS 16001X Product Label	S4616-01-01 CN4610	1	2008-04-14
CS1923 Cap Machining Drawing	S4372-01-02 CN5065	1	2012-10-09
CS1923 G.A. Drawing	S4373	1	2008-12-18
HBS 16001X User Guide	D2473-01-01	1	**
DM700HM/XI User Guide	D2472-01-01	1	**

\*\* no information provided.