



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.: **TRL06ATEX11100X (incorporating variation V3)**

4 Equipment: **DM640XP and DM640XTC Battery Powered Digital Thermometers**

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

6 Address: **Green Lane Business Park, Green Lane, Tewkesbury, Gloucestershire,
GL20 8DE, 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 TRaC Global Ltd, 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 **XU1329/7003, TES-001829-16-00, TRA-006930-33-00A & TRA-014727-33-00A.**

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in section 18 of the schedule to this certificate, has been assured by compliance with:

**EN50014:1997/A2:1999 EN50020:2002 EN50281-1-1:1999/A1:2002
EN60079-26:2004**

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:

Ex II 1 G D EEx ia IIC T4 Tamb = -20°C to +50°C

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

S.P. Winsor

S P Winsor, Certification Officer

Issue date: 2013-09-02

Copy No.: 1e

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Form RF355 is16A

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13 **SCHEDULE TO EC TYPE EXAMINATION CERTIFICATE**

14 **TRL06ATEX11100X (incorporating variation V3)**

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

The DM640XP and DM640XTC are battery powered digital temperature indicators, suitable for use in Category 1G and 1D areas.

The DM640XP is designed to be connected to a RTD (PT100 or NI120) sensor, and the DM640XTC is designed to be attached to type K, T, J, N, R, S, E, or F thermocouples.

The equipment consists of a model SCH4 enclosure manufactured from ABS plastic, with a clear polycarbonate lid / viewing window. A PCB / LCD display assembly with battery holder is encapsulated into the lid with the display assembly and switches protruding from the encapsulant. This is then secured to the enclosure with a screw cap and O-ring arrangement. The enclosure incorporates fixing holes for mounting the unit to a wall or other suitable surface. Temperature and setup information is displayed on a 4-digit LCD display.

Protection is ensured by use of proven components, a defined battery and encapsulated parts.

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

Table of entity parameters	
Parameter	Channel 1
Ui	1.5V
Ii	100mA
Pi	25mW
Ci	0
Li	0

16 **Test report No.:** XU1329/7003, TES-001829-16-00, TRA-006930-33-00A & TRA-014727-33-00A.

17 **“Special Conditions of Safe Use” for Ex Equipment**

1. Electrostatic hazard. Do not charge by rubbing or cleaning with solvents.
2. Do not change battery in a hazardous area.
3. DM640XTC – Only suitable for connection to type K, T, J, R, S, N, E and F thermocouples. These shall conform to the requirements for simple apparatus as defined in Clause 5.4 of EN50020:2002 and the input parameters marked on this unit.
4. DM640XP – Only suitable for connection to resistance temperature sensors types PT100 and Ni120. They shall conform to the requirements for simple apparatus as defined in Clause 5.4 of EN50020:2002 and the input parameters marked on this unit.
5. Use only Tekcell SB-AA11 battery, part no 28-302-0036-00.
6. The unit shall be cleaned regularly to prevent the build up of excessive dust layers.

18 **Essential health and safety requirements**

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.

19 **Additional information**

“Routine tests”, if any:

None.

“Special conditions for manufacture”:

1. It must be ensured that the encapsulant is at least 1mm deep above all components.

CONTINUATION OF SCHEDULE TO CERTIFICATE TRL06ATEX11100X V3

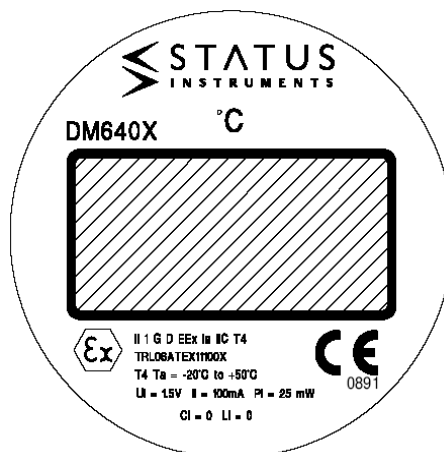
Other information, if any:

None.

Photographs



Details of markings



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 was issued to include report TES-001829-16-00 which evaluated the effect of removing the encapsulant from the LCD display and the underside of the main PCB.
- Variation V2 –Drawings addendum.
- Variation V3 –Add Trade Agent TRAC13ATEX00037X

Notes to CE marking

In respect of CE Marking, TRaC Global Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

CONTINUATION OF SCHEDULE TO CERTIFICATE TRL06ATEX11100X V3

Notes to this certificate

TRaC certification reference: **TRA-014727-32-00**.

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

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

Conditions for manufacturing and control of production also apply to the following Trade Agent Certificates:

TA1: TRAC13ATEX00037X



CONTINUATION OF SCHEDULE TO CERTIFICATE TRL06ATEX11100X V3

APPENDIX A - LIST OF CONTROLLED MANUFACTURER'S DOCUMENTS

Title:	Drawing No.:	Rev. Level:	Date:
DM640X USER GUIDE	D2431_01_05	5	2006-11-24
DM640X SERIES GENERAL ASSEMBLY	S4171_02_02	2	2010-08-02
DM640XP - ITEMS LIST	S4310_01_07	7	2010-08-13
DM640XTC - ITEMS LIST	S4311_01_07	7	2010-08-13
DM640XTC - PCB SURFACE MOUNT ASSEMBLY	S4312_01_03	3	2006-11-24
DM640XTC - PCB SUB ASSEMBLY	S4313_01_03	3	2006-11-24
DM640XP - CIRCUIT DIAGRAM	S4314_01_05	5	2006-11-24
DM640XTC - CIRCUIT DIAGRAM	S4315_01_05	5	2006-11-24
DM640X - FRONT PANEL LABEL	S4316_01_03	3	2006-09-13
DM640X - INTERNAL PRODUCT LABEL	S4317_01_01	1	2006-06-12
DM640X - BATTERY COVER	S4319_01_01	1	2006-06-12
DM640X - ENCAPSULATION	S4320_01_03	3	2010-08-02
DM640XP - PCB SURFACE MOUNT ASSEMBLY	S4384_01_01	1	2006-11-24
DM640XP - PCB SUB ASSEMBLY	S4385_01_01	1	2006-11-24
DM640X PCB DETAIL	S4386_01_01	1	2006-11-24
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