

CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM17US0307X
- Equipment:** Easidew I.S. and Easidew PRO I.S. Dewpoint Transmitters
(Type Reference and Name)
- Name of Listing Company:** Michell Instruments Limited
- Address of Listing Company:** 48 Lancaster Way Business Park
Ely Cambridgeshire CB6 3NW
United Kingdom
- The examination and test results are recorded in confidential report number:

3030238dated 3rd January 2008
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2011, FM Class 3610:2007, FM Class 3810:2005,
ANSI/IEC 60529:2004
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- Equipment Ratings:**

For the Easidew I.S. and Easidew PRO I.S. Dewpoint Transmitters:
Intrinsically Safe for Class I Division 1, Groups A, B, C, D; T4 Ta =70°C hazardous (classified) locations;
Entity; IP66 when connected as per control drawing Ex90385.
Entity Parameters:
Voc = 28V Isc = 93mA Pi = 820 mW Ci = 37nF Li = O

Certificate issued by:

J.E. Marquedant
VP, Manager, Electrical Systems

10 October 2017

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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SCHEDULE



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11. The marking of the equipment shall include:

For the Easidew I.S. and Easidew PRO I.S. Dewpoint Transmitters:

Class I Division 1, Groups A, B, C, D; T4 Ta =70°C; Entity; IP66 When connected as per control drawing Ex90385.

Entity Parameters:

Voc = 28V Isc = 93mA Pi = 820 mW Ci = 37nF Li = O

12. **Description of Equipment:**

The Easidew I.S. and Easidew PRO I.S. Dewpoint Transmitters are a 4-20 mA output loop powered dewpoint sensors. These apparatus comprises of two PCB's housed in a small metal enclosure, a humidity sensor that extends from the metal enclosure and a 4 way plug and socket. The enclosure screws in to a pipe or vessel so that the humidity sensor is in the medium to be measured. The 4 way plug and socket contains two 4-20 mA loop connections, one RS485/earth connection and one RS485 connection. The 4-20 mA loop connection may be made to terminals 1 and 3 only.

Ratings - The Easidew I.S. and Easidew Pro I.S. Dewpoint Transmitters are FM Approved with the following:

Entity parameters

Voc = 28V Isc = 93mA Pi = 820 mW Ci = 37nF Li = O

The transmitters are rated for use at a maximum ambient temperature of +70°C.

13. **Specific Conditions of Use:**

For Easidew I.S. Dewpoint Transmitter:

1. The wiring connections to the free socket shall be made via crimped connectors in such a way that all the strands of wire used are held securely by the crimp.
2. The Easidew I.S. Dewpoint Transmitter does not withstand the 500V ac insulation test to frame. This shall be taken into account on installation.
3. The plastic plug and socket are non-conducting and may generate an ignition capable level of electrostatic charge under extreme conditions. The user should ensure that the equipment is not installed or used in a location where it may be subjected to external conditions (such as high pressure steam), which might cause a build-up of electrostatic charge on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

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For Easidew PRO I.S. Dewpoint Transmitter:

1. The wiring connections to the free socket shall be made via crimped connectors in such a way that all the strands of wire used are held securely by the crimp.
2. The Easidew PRO I.S. Dewpoint Transmitter does not withstand the 500V ac insulation test to frame. This shall be taken into account on installation.

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
3 rd January 2008	Original Issue.
10 th October 2017	<u>Supplement 3:</u> Report Reference: – RR211385 Revision report dated 10 th October 2017. Description of the Change: Manufacturer has changed the Terminal Parameter Pi. Presently listed as Pi = 651mW. Requesting increase to Pi = 820mW. Remove specific conditions of use Item 3 for Easidew PRO I.S. Model. Remove of PLA for Michell Inc. Update of product name. Certificate updated to new format.

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