



## EU Type Examination Certificate CML 19ATEX1411X Issue 2

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Easidew PRO XP Dew Point Transmitter**
- 3 Manufacturer **Michell Instruments Ltd**
- 4 Address 48 Lancaster Way Business Park,  
Ely,  
Cambridgeshire, CB6 3NW,  
United Kingdom
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:


EN IEC 60079-0:2018

EN 60079-1:2014

EN 60079-11:2012

EN 60079-31:2014

- 10 The equipment shall be marked with the following:

 II 2 G D

Ex db ia IIC T6 Gb

Ex tb IIIC T80°C Db IP66

Ta= -20°C to +70°C



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## 11 Description

The Easidew PRO XP dew point transmitter is a 4-20 mA output loop powered (rated 28 V DC) dew point sensor comprising two PCBs housed in a flameproof metal enclosure of either aluminium or stainless steel.

A humidity sensor and thermistor are mounted externally to the enclosure and connected to the internal PCBs via a sensor body comprising a 4-pin glass-to-metal seal. The internal PCBs are: 1) a processing PCB; and 2) a dual channel 'ia' protection circuit PCB to provide barrier protection for the external humidity sensor and thermistor.

The enclosure possesses cable gland entries (2 off) for the end user to effect installation. The enclosure is two-part, where the lid section is threaded on to the base section. The lid is removed to provide access for end user connections via a 4-way two-part connector and can be either a solid construction or contain a display window.

The entire transmitter can be installed at the point of measurement via a mounting thread on the external portion of the sensor body. A locking nut, also a part of the sensor body portion, provides the ability for the transmitter to be most conveniently positioned.

### Electrical ratings:

14 to 28 Vdc, 0.7 A, 1 W

Maximum working pressure of sensor is 450 bar

The entity parameters for the equipment are:

Parameter	Sensor	Channel Thermistor	Both combined
Uo	6.51 V	6.51 V	6.51 V
Io	658 mA	658 mA	1316 mA
Po	0.554 W	0.554 W	1.107 W
Ci	0 $\mu$ F	0 $\mu$ F	0 $\mu$ F
Li	0 $\mu$ H	0 $\mu$ H	0 $\mu$ H
Co	22 $\mu$ F	22 $\mu$ F	22 $\mu$ F
Lo	82 $\mu$ H	82 $\mu$ H	20.5 $\mu$ H
Lo/Ro	33.2 $\mu$ H/ $\Omega$	33.2 $\mu$ H/ $\Omega$	16.6 $\mu$ H/ $\Omega$

### Variation 1

This issue introduces the following changes:

- i. To clarify the marking and Specific Conditions of Use with regards to installation.



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## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	23 Oct 2019	R12465A/00	Issue of prime certificate
1	11 May 2020	-	Re-issued to include IP rating
2	17 May 2021	R14193A/00	To introduce Variation 1

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate. A copy of the relevant component enclosure certificate shall be provided with each unit supplied.
- ii. The Easidew PRO XP Dew Point Transmitter shall be designed in accordance with general electrical safety standards e.g. IEC 60950 or IEC 61010-1.

## 14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- i. The equipment has been assessed with a Um of 28 V.
- ii. The transmitter shall not be installed in such a manner that the sensing probe is in a dust environment.
- iii. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD. The equipment shall only be wiped with a damp cloth.
- iv. When installing the transmitter, a torque of 10 Nm shall be applied to the sensor body/housing positioning lock nut to secure it. Refer to manufacturer's instructions for further details.

## Certificate Annex

**Certificate Number** CML 19ATEX1411X  
**Equipment** Easidew PRO XP Dew Point Transmitter  
**Manufacturer** Michell Instruments Ltd



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
Ex90561	1 to 4	03	22 Oct 2019	Easidew PRO XP Dew Point Transmitter – ATEX & IECEx Certification Control Drawing
EX83885	1 of 1	02	22 Oct 2019	Dual Channel ib Protection Circuit – Parts List
Ex65003	1 of 1	01	22 Oct 2019	Dual Channel ib Protection PCB Details Certification Control Drawing

### Issue 1

No new drawings

### Issue 2

Drawing No	Sheets	Rev	Approved date	Title
Ex90561	1 to 4	05	?? May 2021	Easidew PRO XP Dew Point Transmitter – ATEX & IECEx Certification Control Drawing