EU Type Examination Certificate CML 17ATEX2015X Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment **PD66xx Series Loop Powered Indicator**

3 Manufacturer **Precision Digital Corporation**

4 Address 233 South Street
Hopkinton
MA 01748
USA

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, 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 60079-0:2012+A11:2013 EN 60079-11:2012

10 The equipment shall be marked with the following:

II 1 G

Ex ia IIC T4 Ga

Ta = -40°C to +70°C

A Snowdon

11 Description

The PD66xx Series Loop Powered Indicators are general purpose loop powered indicators with liquid crystal displays and programming buttons. Various models are available with display and measurement options.

All models have a digital contact (switch) input and two open collector outputs. Optionally, the meters may be fitted with two solid state relay outputs, and/or a 4-20 mA loop output which may be HART compatible.

The following models and options are covered by this certificate:

PD66XX – L – X – X – XXXXXX

Cosmetic	X	Cosmetic modifications (not safety related)

Communications	N	No communications
	H	HART enabled analogue output

Output	N	No options
	2	Two solid state relays
	3	Analogue output
	5	Two solid state relays and analogue output

Power	L	Loop powered

Series	06	Process display
	07	Feet and inches display with bargraph
	08	Decimal display with bargraph
	26	Rate/totalizer display
	28	Rate/totalizer display with bargraph

Intrinsic safety is achieved by limiting energy storage and discharge, and by connecting to the non-hazardous area via intrinsically safe interface devices.

The equipment has the following safety description for each port:

Loop/power connection			Open collector outputs			4-20mA linear output			4-20mA HART output			Switch port			Relay outputs		
Ui	=	30V	Ui	=	30V	Ui	=	30V	Ui	=	30V	Ui	=	30V	Ui	=	30V
Ii	=	175mA	Ii	=	175mA	Ii	=	175mA	Ii	=	175mA	Ii	=	175mA	Ii	=	1.0A
Pi	=	1W	Pi	=	1W	Pi	=	1W	Pi	=	1W	Pi	=	1W	Pi	=	1.1W
Ci	=	0	Ci	=	0	Ci	=	0	Ci	=	0	Ci	=	0	Ci	=	0.012µF
Li	=	0	Li	=	0	Li	=	0	Li	=	0	Li	=	0	Li	=	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Uo	=	11.55V
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Io	=	0.001A
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Po	=	0.013W

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	25 Jul 2017	R1917A/00	Report for the prime certificate issue

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

13 Conditions of manufacture

None

14 Special Conditions for Safe Use (Conditions of Certification)

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

14.1 Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.

14.2 The equipment shall be installed in an enclosure which provides a minimum degree of protection of IP20 for the equipment connections.

14.3 The equipment loop/power port shall be connected to an intrinsically safe barrier with Uo ≥ 11V.

Certificate Annex

Certificate Number CML 17ATEX2015X

Equipment PD66xx Series Loop Powered Indicator

Manufacturer Precision Digital Corporation

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

Issue 0

Drawing No	Sheets	Rev	Approved date	**Title**
DW2515	1 to 21	A	25 Jul 2017	PD66XX Series ATEX Certification Drawing