

# 1 EC-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC**

3 **EC-Type Examination Certificate No:** FM08ATEX0058X

4 **Equipment or protective system:** PD688 Loop-Powered Panel Meter and PD689 Loop-Powered Rate/Totalizer  
(Type Reference and Name)

5 **Name of Applicant:** Precision Digital Corporation

6 **Address of Applicant:** 233 South Street  
Hopkinton, MA 01748  
USA

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

8 FM Approvals Ltd, notified body number 1725 in accordance with Article 9 of 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 intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3031346EC dated 31<sup>st</sup> December 2009.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012 +A11:2013 and EN 60079-11:2012

10 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.

11 This EC-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

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



II 1 G Ex ia IIC T4 Ta = -40°C to +65°C



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**Mick Gower**  
Certification Manager, FM Approvals Ltd.

Issue date: 24<sup>th</sup> March 2016

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

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# SCHEDULE

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## 13 Description of Equipment or Protective System:

The PD688 is a Loop-Powered Panel Meter with 5-digit display with bar graph and on-screen custom engineering units.

The PD689 is a Loop-Powered Rate/Totalizer with 5-digit display with bar graph and on-screen custom engineering units.

Both the PD688 and the PD689 have loop-powered backlights.

The PD688 and the PD689 comprise of a display board and a terminal board, housed within a Noryl enclosure with a polycarbonate window. Each unit has four push buttons on the front panel.

### PD688a. Loop-Powered Indicator.

Energy limitation parameters

$U_i = 30 \text{ V}$      $I_i = 175 \text{ mA}$      $P_i = 1.0 \text{ W}$      $C_i = 0$      $L_i = 0$

$a = 0$  or  $1$

### PD689a. Loop-Powered Rate/Totalizer.

Energy limitation parameters

$U_i = 30 \text{ V}$      $I_i = 175 \text{ mA}$      $P_i = 1.0 \text{ W}$      $C_i = 0$      $L_i = 0$

$a = 0$  or  $1$

## 14 Specific Conditions of Use:

The permitted ambient temperature range for the PD688 and PD689 is  $-40^\circ\text{C}$  to  $+65^\circ\text{C}$ .

## 15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

## 16 Test and Assessment Procedure and Conditions:

This EC-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

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# SCHEDULE



Member of the FM Global Group

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17 **Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

18 **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
31 <sup>st</sup> December 2009	Original Issue.
24 <sup>th</sup> March 2016	<u>Supplement 1:</u> Report Reference: – RR204164; dated 22 <sup>nd</sup> March 2016 Description of the Change: Customer address updated. Standards updated to current revisions.

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