



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEx FMG 13.0005X</b>	Page 1 of 5	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 10	Issue 9 (2020-01-30)
Date of Issue:	2020-11-03		Issue 8 (2019-10-08)
Applicant:	<b>Great Plains Industries, Inc</b> 5252 E. 36th Street North. Wichita, Kansas 67220 <b>United States of America</b>		Issue 7 (2019-03-27)
Equipment:	<b>Electronic Digital Meter</b>		Issue 6 (2019-01-07)
Optional accessory:	Remote (Display) Kit Assembly 113275-1		Issue 5 (2018-11-20)
Type of Protection:	<b>Intrinsically Safe ia</b>		Issue 4 (2017-08-28)
Marking:	Ex ia IIC T4 Ga Ta = -40°C to 54°C IP65		Issue 3 (2016-10-25)
			Issue 2 (2016-05-10)
			Issue 1 (2013-08-30)
			Issue 0 (2013-06-14)

Approved for issue on behalf of the IECEx  
Certification Body:

**J.E.Marquedant**

Position:

**VP, Manager - Electrical Systems**

Signature:  
(for printed version)

Date:

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Certificate issued by:

**FM Approvals LLC**  
**1151 Boston-Providence Turnpike**  
**Norwood, MA 02062**  
**United States of America**





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Manufacturer: **Great Plains Industries, Inc.**  
5252 E. 36th Street North.  
Wichita, Kansas 67220 USA  
**United States of America**

Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-11:2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[US/FMG/ExTR13.0005/00](#)  
[US/FMG/ExTR13.0005/03](#)  
[US/FMG/ExTR13.0005/06](#)  
[US/FMG/ExTR13.0005/09](#)

[US/FMG/ExTR13.0005/01](#)  
[US/FMG/ExTR13.0005/04](#)  
[US/FMG/ExTR13.0005/07](#)  
[US/FMG/ExTR13.0005/10](#)

[US/FMG/ExTR13.0005/02](#)  
[US/FMG/ExTR13.0005/05](#)  
[US/FMG/ExTR13.0005/08](#)

Quality Assessment Report:

[GB/FME/QAR13.0010/05](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Electronic Digital Meters, models 03, 04, 05, 06, 07, 08 09, A1, A2, G2 and N2 are battery powered turbine flow meters. The meters contain a turbine assembly, microprocessor and LCD readout and are designed for measuring batch or cumulative quantities of liquids including fuels. Each turbine assembly is contained in a housing made of brass, aluminium, stainless steel, nylon or PVDF plastic. The plastic versions are carbon-filled and electrically conductive. Process pressure rating varies depending on the enclosure material and construction. The display cover assembly is clear plastic and all of the electronics except for the batteries and the LCD display are completely encapsulated (the Q1, Q9 and R9 versions are conformal coated). A remote kit option is also available that permits the electronics assembly to be mounted up to 100 feet (30 meters) from the turbine assembly.

The ambient operating temperature range of Electronic Digital Meters are -40°C to 54°C. The apparatus is powered by two FDK Lithium CR12600SE 3V batteries (GPI battery 902004-02), except for the Q1, Q9 and R9 versions which use Energizer E92 / EN92 or Duracell MN2400 Alkaline batteries connected in series. There are no other terminals for customer connection. The Q1, Q9, and R9 versions have one terminal connection for a coil.

The enclosure has an ingress protection rating of IP65.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

1. All computer assemblies are to be used with GPI battery 902004-02 except Q1, Q9 and R9 versions which use Energizer E92 / EN92 or Duracell MN2400 Alkaline batteries.
2. GPI remote kit assembly 113275-1 may be used with the meter when installed in accordance with GPI Manual No. 920507-01. GPI Remote Kit Assembly 113275-10 may be used with the meter when installed in accordance with GPI Manual No. 920507-02.
3. The apparatus enclosure may contain aluminum which is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.
4. Part of the enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth.



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## Equipment (continued):

### Model abcdefg. Electronic Digital Meter.

a = Product Identifier A1 or A2.

b = Computer Assembly 01, 02, 03, 04, 05, 06, 07, 08, 09, Q9, R9 or XX.

c = Factory Calibration G, L, Q, Z, P, B, U, M, F, I, J, O or X.

d = Time Base M, S, H, D or X.

e = Turbine Housing A025, A050, A075, A100, A150, A200, B050, B075, B100, B150, B200, N025, N100, P050, P100, S025, S050, S075, S100, S150, S200, V025, V100, X025, X050, X075, X100, X150, X200, Z050, Z100, XXXX or 0000.

f = Fitting N, I, B, T, F, X or 0.

g = Packaging A1, A2, B1, B2, B3, C1, C2, C3, C4, D1, D2, J1, J2, K1, K2, K3, K4, K5, L1, L2, L3, L4, L5, XX or 00.

GPI Remote Kit Assembly 113275-1 per installation drawing 920507-01

GPI Remote Kit Assembly 113275-10 per installation drawing 920507-02

### Model abcdefgh. Electronic Digital Meter.

a = Product Identifier: G2 or N2.

b = Turbine Body Material: A, B, P, S, X or Z.

c = Turbine Size: 05, 07, 10, 15, or 20.

d = Fitting Type: N, I, X, T or F.

e = Computer Assembly: 03, 04, 05, 06, 07, 08, 09, 19, Q1, Q9, R9 or XX.

f = Factory Calibration: G, L, Q, Z, P, B, U, M, F, I, J, O or X.

g = Time Base M, S, H, D or X.

h = Packaging kit: A, B, C, D or E

GPI Remote Kit Assembly 113275-1 per installation drawing 920507-01

GPI Remote Kit Assembly 113275-10 per installation drawing 920507-02

### Model abcd. Electronic Digital Meter.

a = Computer Assembly 03, 04, 05, 06, 07, 08 or 09.

b = Housing/Turbine Assembly A, N or S.

c = Flow Range 11, 12, 13, 30, 31, or 32.

d = Factory Cal. Units GM, LM or GMME

GPI Remote Kit Assembly 113275-1 per installation drawing 920507-01

GPI Remote Kit Assembly 113275-10 per installation drawing 920507-02



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Addition of Q1, Q9, and R9 versions with new batteries (**Energizer E92 / EN92 or Duracell MN2400 Alkaline**) new computer display, and relocated rotation sensing coil.