

# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx INE 16.0015X Issue No: 0 Certificate history:  
Issue No. 0 (2016-04-14)

Status: **Current** Page 1 of 3

Date of Issue: **2016-04-14**

Applicant: **Digital Electronics Corporation**  
4-4-9 Kitahama, Chuo-Ku, OSAKA-SHI  
OSAKA 541-0041  
Japan

Electrical Apparatus: **Graphic Terminal type PFXGM4...\* or PFXM4...\* or PFXLM4...\***  
*Optional accessory:*

Type of Protection: **nA nC tc**

Marking:  
Ex nA nC IIC T4 Gc  
Ex tc IIIC T135°C Dc

Approved for issue on behalf of the IECEx  
Certification Body:

Thierry HOUEIX

Position:

Ex Certification Officer

Signature:  
(for printed version)

Date:

2016-04-14



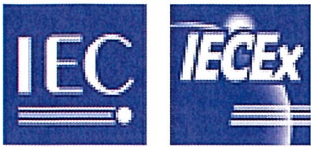
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

**INERIS**  
Institut National de l'Environnement Industriel  
et des Risques  
BP n2  
Parc Technologique ALATA  
F-60550 Verneuil-En-Halatte  
France

INERIS is accredited by COFRAC under number 5-0045 for certification of products and services (scope of accreditation is available on COFRAC website [www.cofrac.fr](http://www.cofrac.fr))

The certification rules are available on the INERIS website [www.ineris.fr](http://www.ineris.fr).



# IECEX Certificate of Conformity

Certificate No: IECEX INE 16.0015X Issue No: 0  
Date of Issue: **2016-04-14** Page 2 of 3  
Manufacturer: **DIGITAL ELECTRONICS CORPORATION**  
4-4-9 Kitahama, Chuo-Ku, OSAKA-SHI  
OSAKA 541-0041  
**Japan**

Additional Manufacturing  
location(s):

**WUXI Pro-face Electronics Co., Ltd**  
No.20 Hangjiang Road,  
National Hi-tech Industrial Development District  
214028 Wuxi  
China

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 electrical apparatus 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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-15 : 2010</b> Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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*

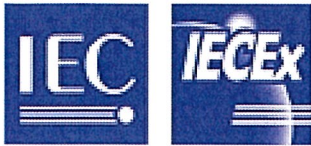
Test Report:

FR/INE/ExTR16.0015/00

Quality Assessment Report:

FR/INE/QAR12.0002/01

FR/INE/QAR16.0001/00



# IECEx Certificate of Conformity

Certificate No: IECEx INE 16.0015X

Issue No: 0

Date of Issue: 2016-04-14

Page 3 of 3

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

Graphic terminals type PFXGM4...\* or PFXLM4...\* or PFXXM4...\* are user interfaces which include a touch-screen display, a box unit and printed circuit boards. They are non-sparking during conditions of normal operation and are protected by protection modes Ex nA and Ex tc, except the touch-screen display and relays which are protected by Ex nC.

The equipment is classified:

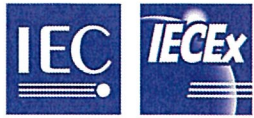
- Gc for Gas Group IIC and Temperature Class T4 for Gas application;
- Dc for Dust Group IIIC and Temperature Class T135°C for Dust application.

### CONDITIONS OF CERTIFICATION: YES as shown below:

- Graphic terminal type PFXGM4...\* or PFXLM4...\* or PFXXM4...\* is intended to be used in an operating temperature range from 0°C to 50°C.
  - Graphic terminal type PFXGM4...\* or PFXLM4...\* or PFXXM4...\* has to be installed in an additional enclosure insuring a minimal protection level IP54 for a Gc equipment, IP6X for Dc equipment in accordance with the requirements of IEC 60079-0: 2011, IEC 60079-15:2010 and IEC 60079-31: 2013 standards.
  - The enclosure equipped with graphic terminal type PFXGM4...\* or PFXLM4...\* or PFXXM4...\* has to be certified and shouldn't be opened when an explosive atmosphere is present.
  - Graphic terminal type PFXGM4...\* or PFXLM4...\* or PFXXM4...\* presents a potential electrostatic charging hazard, safety precautions are defined in the instructions guide.
  - Graphic terminal type PFXGM4...\* or PFXLM4...\* or PFXXM4...\* doesn't have to be exposed at direct sunlight.
  - The power supply cable, communication cables, USB or mini-USB connectors and RJ45 connectors don't have to be disconnected while circuit is live.
  - Fuses don't have to be changed in presence of explosive atmospheres.
- The other conditions are stipulated in the instructions guide.

### Annex:

[IECEx INE 16.0015X-00\\_Annex.pdf](#)



# IECEx Certificate of Conformity

Certificate No.: IECEx INE 16.0015X

Issue No.: 0

Page 1 of 2

Annex: IECEx INE 16.0015X-00\_Annex.pdf

## PARAMETERS RELATING TO THE SAFETY

The terminals have to be supplied with the following rated voltage:

	$U_n$ (V <sub>d.c.</sub> )
PFXGM4...* or PFXLM4...* or PFXXM4...*	24

## MARKING

Marking has to be readable and indelible; it has to include the following indications:

- DIGITAL ELECTRONICS CORPORATION  
541-0041 OSAKA  
JAPAN
- PFXGM4...\* or PFXXM4...\* or PFXLM4...\* (\* see descriptive table of equipment below)
- IECEx INE 16.0015X
- (Serial number)
- Ex nA nC IIC T4 Gc
- Ex tc IIIC T135°C Dc
- T<sub>amb</sub>: 0°C to +50°C

### **WARNINGS:**

- DO NOT DISCONNECT WHEN CIRCUIT IS LIVE
- POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS.

Marking may be carried out in the language of the country of use.

The equipment has also to carry the marking normally stipulated by its construction standards.

## **DESCRIPTIVE TABLE OF EQUIPMENT:**

<b>PFXGM4...*</b>	
Product	Description
PFXGM4201TAD	Small panel 3.5" LCD
PFXGM4301TAD	Small panel 5.7" LCD
PFXGM4B01D	Rear module : CPU

<b>PFXLM4...*</b>	
Product	Description
PFXLM4201TADDC PFXLM4201TADDK	Small controller panel 3.5" LCD (machine version)
PFXLM4301TADDC PFXLM4301TADDK	Small controller panel 5.7" LCD (machine version)
PFXLM4B01DDC PFXLM4B01DDK	Rear module (machine version)
PFXLM4201TADAC PFXLM4201TADAK	Small controller panel 3.5" LCD (process version)
PFXLM4301TADAC PFXLM4301TADAK	Small controller panel 5.7" LCD (process version)
PFXLM4B01DAC PFXLM4B01DAK	Rear module (process version)



# IECEx Certificate of Conformity

Certificate No.: IECEx INE 16.0015X

Issue No.: 0

Page 2 of 2

Annex: IECEx INE 16.0015X-00\_Annex.pdf

PFXXM4...*	
Product	Description
PFXXM4200TP	Front display 3.5" LCD
PFXXM4300TP	Front display 5.7" LCD

## ROUTINE EXAMINATIONS AND TESTS

- None