

GP4000 Series

ATEX Instruction Guide

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Concerning the use of GP4000 Series Graphic Operator Interface for applications in potentially explosive atmospheres (Zones 2/22)

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Type examination certificate: INERIS 12ATEX3008X

SAFETY INSTRUCTIONS

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a Danger or Warning safety label indicates that an electrical hazard exists, which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER

DANGER indicates an imminently hazardous situation, which, if not avoided, **will result in** death or serious injury.



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Printed in

Pro-face
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⚠ WARNING

WARNING indicates a potentially hazardous situation, which, if not avoided, **can result in** death, serious injury, or equipment damage.

⚠ CAUTION

CAUTION indicates a potentially hazardous situation, which, if not avoided, **can result in** injury or equipment damage.

NOTICE

NOTICE is used to address practices not related to physical injury.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Digital Electronics Corporation for any consequences arising out of the use of this material. A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

SCOPE

This present document applies when the GP4000 Series Graphic Operator Interface bears  marking. They are supplied only with DC 24 V. This documentation has to be kept and always refer to those instructions for installation, operation, maintenance or evolution of your system.

You can download this instruction guide at

www.pro-face.com.

If any translation is needed, you can contact your local Pro-face support or sales center.

Relevant Standards

These devices have been manufactured in accordance with:

- Standard EN 60079-0 (2009) and IEC 60079-0 Ed6 (2011): Explosive atmospheres - Part 0: Equipment - General requirements.
- Standard EN 60079-15 (2010) and IEC 60079-15 Ed4 (2010): Explosive atmospheres - Part 15: Equipment protection by type of protection "n".
- Standard EN 60079-31 (2009) and IEC 60079-31 Ed1 (2008): Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t".



DANGER

POTENTIAL FOR EXPLOSION

Install, use, and maintain these modules in accordance with:

- Standard IEC 60079-14 Ed4 (2007): Explosive atmospheres - Part 14: Electrical installations design, selection and erection.
- Standard EN 60079-17 (2007): Inspection and maintenance of electrical installations in hazardous areas.
- Standard EN 61241-14 (2004): Electrical apparatus for use in the presence of combustible dust, Part 14: Electrical apparatus protected by enclosures. Selection, installation and maintenance.
- Edicts, by-laws, laws, directives, circulars, standards, regulations and any other document relating to where the apparatus is installed.

Failure to follow these instructions will result in death or serious injury.

Permitted zones of application

Refer to the section titled "Markings" to get information about the permitted zones of protection and the types of protection.

- GP4000 Series Graphic Operator Interface installed in zones 2/22 hazardous areas must be certified and bear the marking.
- Ensure with the marking that the terminals are compatible with the conditions permitted for the hazardous area at the site where it is being used.

Installation, Operation and Maintenance

Make sure you follow all the recommendations in the GP4000 Series Installation Guide and additionally those listed below.



DANGER

POTENTIAL FOR EXPLOSION

- Confirm that the location is free from explosively hazardous gases or dust before connecting or disconnecting equipment, replacing or wiring modules.
- The ambient temperature in protective enclosure must not exceed 50°C or 55°C (refer to marking).
- Confirm each interface (COM1, COM2, LAN), field wiring terminal blocks and the SD Card / Battery Cover have been securely locked.
- Confirm USB cables are attached with its appropriate clamp.
- Modules must be installed in a protective enclosure that provides at least the following degree of protection:
 - IP54 for atmosphere with gas
 - IP6x for atmosphere with dust
- Do not open the protective enclosure while the system is powered up.
- Confirm that the power supply has been turned OFF before disconnecting, replacing or wiring modules.
- Ensure that the FG (Functional Ground) on the power supply is properly connected to ground.
- Use only screw fasteners suitable for installations in explosive atmospheres.
- Do not use damaged equipment.
- Use Touch Pen CA7-TPPEN/ALL-01 on all GP4000 Series used in zone 2 and zone 22 areas.

Failure to follow these instructions will result in death or serious injury.

⚠ CAUTION

ENVIRONMENTAL HAZARDS TO THE EQUIPMENT

- Do not allow layers of dust to form on the GP4000 Series Graphic Operator Interface. Clean the unit regularly.
- The ambient temperature in protective enclosure must not exceed 50°C or 55°C (refer to marking).
- Ensure that the GP4000 Series are installed according to its manufacturer's specifications.

Failure to follow this instruction can result in injury or equipment damage.

Markings

ATEX and markings, applied to the GP4000 Series Graphic Operator Interface, are as follows:

Models PFXGP4301TAD, PFXGP4303TAD, PFXGP4401TAD, PFXGP4501TAD, PFXGP4501TMD, PFXGP4503TAD, PFXGP4601TAD, PFXGP4601TMD, PFXGP4603TAD:	Models PFXGP4201TAD, PFXGP4201TADW, PFXGP4203TAD, PFXGP4301TADW, PFXGP4401WADW, PFXGP4501TADW:
Digital Electronics Corporation 559-0031 Osaka Japan  II 3 G D Ex nA nC IIC T5 Gc Ex tc IIIC T100°C Dc IP64 INERIS 12ATEX3008X Tamb: 0°C to +55°C	Digital Electronics Corporation 559-0031 Osaka Japan  II 3 G D Ex nA nC IIC T5 Gc Ex tc IIIC T100°C Dc IP64 INERIS 12ATEX3008X Tamb: 0°C to +50°C

WARNING: Do not disconnect while circuit is live. Potential electrostatic charges. Wipe the front panel of the terminal with a damp cloth before turning on.

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DÉCLARATION CE DE CONFORMITÉ

Pour appareils destinés à être utilisés en atmosphères explosives
(Au titre de la directive Atmosphères Explosibles N° 94/9/CE)

NOUS : Pro-face Europe B.V.
Taurusavenue 133, 2132 LS Hoofddorp
The Netherlands

Déclarons que les appareils

MARQUE : Pro-face
NOM, TYPE : GP4000 Series
MODELES : PFXGP4, suivi de lettres et de chiffres
décrits dans l'attestation INERIS
12ATEX3008X

répondent de par leur conception et leur construction, aux exigences des Directives européennes et normes applicables :

Directive(s) :	Norme(s) :
- Directive ATEX	94/9/CE
	- EN 60079-0
	- EN 60079-15
	- EN 60079-31

sous réserve d'installation, d'entretien et d'utilisation conformes à sa destination, à la réglementation, aux normes en vigueur, aux instructions du constructeur et aux règles de l'art.

Marquage des appareils : II 3 G D
Marquage complémentaire : Ex nA nC IIC T5 Gc
Ex tc IIIC T100°C Dc IP64
Tamb. 0°C to +50°C /+55°C

Attestation d'examen CE de type : INERIS 12ATEX3008X

Délivré par : INERIS
ParcTechnologique Alata
F- 60055 Verneuil en Halatte

Yoshihiro Yasumura
President of Pro-face Europe B.V.
Netherlands - 2132 LS Hoofddorp 2013-2



EC DECLARATION OF CONFORMITY

For units intended to be used in potentially explosive atmosphere
(By way of the Explosive Atmospheres directive No. 94/9/EC)

WE : Pro-face Europe B.V.
Taurusavenue 133, 2132 LS Hoofddorp
The Netherlands

hereby declare that the units

TRADEMARK : Pro-face
PRODUCT, TYPE : GP4000 Series
MODELS : PFXGP4, followed by letters and numbers listed
in certification INERIS 12ATEX3008X

which, through their design and construction, meet the requirements of the European Directives and applicable standards:

Directive(s) :	Standard(s) :	
- ATEX directive	94/9/CE	- EN 60079-0
		- EN 60079-15
		- EN 60079-31

It is important that the safety component is subject to correct installation, maintenance and use conforming to its intended purpose, to the applicable regulations and standards, to the supplier's instructions and to standard practices.

Marking of units: II 3 G D
Additional marking: Ex nA nC IIC T5 Gc
Ex tc IIIC T100°C Dc IP64
Tamb. 0°C to +50°C /+55°C
EC type examination certification: INERIS 12ATEX3008X
Delivered by: INERIS
ParcTechnologique Alata
F- 60055 Verneuil en Halatte

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