

# DET NORSKE VERITAS

# TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. A-12795

This is to certify that the Peripheral Equipment

with type designation(s) Graphic Operator Interface GP4000 Series

Manufactured by

# **Digital Electronics Corporation** Osaka, Japan

is found to comply with Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

> Application Location classes:

Temperature	D
Humidity	В
Vibration	A
EMC	В
Enclosure	B (Panel front only)*

**IP65 Tested** 

Busan, 2012-07-23 for Det Norske Veritas AS

This Certificate is valid until 2016-12-31

Michael Jost Auf der Stroth Head of Section

DNV local office: Kobe

Baeg Soon Choi Surveyor

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Certificate No.: A-12795 File No .: 899.60

Job Id.:

262.1-012543-1

#### Product description

Model reference for Pro-face brand	Display	Description
PFXGP4601TAD	12.1" SVGA TFT color LCD	Analog touch panel, DC type, with/without coating on PCBA
PFXGP4601TMD	12.1" SVGA TFT color LCD	Matrix touch panel, DC type, with/without coating on PCBA
PFXGP4603TAD	12.1" SVGA TFT color LCD	Analog touch panel, DC type, isolated RS-485, with/without coating on PCBA
PFXGP4501TADW	10.4" VGA TFT color LCD	Analog touch panel, DC type, small memory, with/without coating on PCBA
PFXGP4501TAD	10.4" VGA TFT color LCD	Analog touch panel, DC type, with/without coating on PCBA
PFXGP4501TMD	10.4" VGA TFT color LCD	Matrix touch panel, DC type, with/without coating on PCBA
PFXGP4503TAD	10.4" VGA TFT color LCD	Analog touch panel, DC type, isolated RS-485, with/without coating on PCBA
PFXGP4401TAD	7.5" VGA TFT color LCD	Analog touch panel, DC type, with/without coating on PCBA
PFXGP4401WADW	7.0" WVGA Wide TFT color LCD	Analog touch panel, DC type, small memory, with/without coating on PCBA
PFXGP4301TAD	5.7" QVGA TFT color LCD	Analog touch panel, DC type, with/without coating on PCBA
PFXGP4303TAD	5.7" QVGA TFT color LCD	Analog touch panel, DC type, isolated RS-485, with/without coating on PCBA
PFXGP4301TADW	5.7" QVGA TFT color LCD	Analog touch panel, DC type, small memory, with/without coating on PCBA
PFXGP4201TAD	3.5" QVGA TFT color LCD	Analog touch panel, DC type, with/without coating on PCBA
PFXGP4203TAD	3.5" QVGA TFT color LCD	Analog touch panel, DC type, isolated RS-485, with/without coating on PCBA
PFXGP4201TADW	3.5" QVGA TFT color LCD	Analog touch panel, DC type, small memory, with/without coating on PCBA

<sup>\*\*</sup> All models may be followed by any letter or number that indicates PCBA coating or software combinations.

#### Manufactured by

Place of Manufacture: Wuxi Pro-face Electronics Co., Ltd. No.20 Hanjiang Road, Wuxi, New District, Wuxi, Jiangsu, China, 214028

# Responsibility

Digital Electronics Corporation works/ takes the responsibility that both design and production are in compliance with Rules, Standard and/or Regulations listed on page 1 of this Type Approval Certificate.

#### Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by inclusion in an instrument list, by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

## Application/Limitation

An appropriate noise filter and/or ferrite cores shall be used on the connected cables according to the manufacturer's specifications.

DET NORSKE VERITAS AS, Veritasveien 1, NO-1322 Høvik, Norway, Tel.: +47 67 57 99 00, Fax: +47 67 57 99 11, Org.No. NO 945 748 931 MVA www.dnv.com Form No.: TA 1411a Issue: October 2009



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# Type Approval documentation

Type Test Report for Graphic Operator Interface GP4000 Series (Doc No.NSH-11032-TR, 284 pages) GP4000 Series Hardware Manual Test Specifications(Doc No. NSH-11032-TS)

#### Tests carried out

Applicable tests according to Standard for Certification No.2.4, April 2006.

### Marking of product

Products will be marked as

Pro-face Digital Electronics Corp. JAPAN

## Certificate Retention Survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the survey are:

- Ensure that type approved documentation is available.
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines.
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications.
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given.
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Retention survey is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE