



Marine & Offshore
Division

Certificate number: 48522/A0 BV

File number: AP 4732

Product code: 4483D

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

MARINER SYSTEMS (UK) Ltd

Wokingham - UNITED KINGDOM

for the type of product

DISPLAY MONITORS / VIDEO SCREENS / TERMINALS

HP E202 / E232 / E242 Monitors

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

EC Code: 41B

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 30 Jan 2022

For BUREAU VERITAS,

At BV LONDON, on 30 Jan 2017,

Spencer Yule



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarmb/jsp/viewPublicPdfTypepec.jsp?id=xahtcaiqv>
BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation:

HP EliteDisplay E202 20-Inch Monitor, E232 23-Inch Monitor & E242 24-Inch Monitor

- Product description:

The HP EliteDisplay E202 20" Monitor IPS LED Backlit Monitor must be used in conjunction with the appropriate Mariner Systems Kits: MS1450 - Desk mounted, MS1455 - Wall mounted, or MS1460 - Console mounted.

The HP EliteDisplay E232 23" Monitor IPS LED Backlit Monitor must be used in conjunction with the appropriate Mariner Systems Kits: MS1470 - Desk mounted, MS1475 - Wall mounted, or MS1480 - Console mounted.

The HP EliteDisplay E242 24" Monitor IPS LED Backlit Monitor must be used in conjunction with the appropriate Mariner Systems Kits: MS1510 - Desk mounted, MS1515 - Wall mounted, or MS1520 - Console mounted.

2. DOCUMENTS AND DRAWINGS:

- HP EliteDisplay E202 20-inch Monitor QuickSpec No. c04924740 - DA - 15508 - Worldwide - Version 2 - January 19, 2016.
- HP EliteDisplay E232 23-inch Monitor QuickSpec No. c04784501 - Worldwide - Version 3 - October 15, 2015.
- HP EliteDisplay E242 24-inch Monitor QuickSpec No. c04820064 - DA - 15432 - Worldwide - Version 2 - October 16, 2015.
- Mariner Systems drawing MS1450_A Issue 1, dated 16 May 2016
- Mariner Systems drawing MS1455_A Issue 1, dated 16 May 2016
- Mariner Systems drawing MS1460_A Issue 1, dated 16 May 2016
- Mariner Systems drawing MS1460_DD Issue 1, dated 16 May 2016
- Mariner Systems drawing MS1470_A Issue 1, dated 4 Jan 2016
- Mariner Systems drawing MS1475_A Issue 1, dated 4 Jan 2016
- Mariner Systems drawing MS1480_A Issue 2, dated 17 Dec 2015
- Mariner Systems drawing MS1480_DD Issue 1, dated 16 Nov 2015
- Mariner Systems drawing MS1510_A Issue 1, dated 4 Jan 2016
- Mariner Systems drawing MS1515_A Issue 1, dated 4 Jan 2016
- Mariner Systems drawing MS1520_A Issue 1, dated 17 Dec 2015
- Mariner Systems drawing MS1520_DD Issue 1, dated 17 Dec 2015
- Mariner Systems Marine Test Requirements Issue 11, dated 18-February-2016.

3. TEST REPORTS:

MS Testing:

- Environmental test report HP EliteDisplay E202 20" Monitor No. TL16045, dated Apr 7, 2016
- Environmental test report HP EliteDisplay E232 23" Monitor No. TL15099, dated Nov 9, 2015
- Environmental test report HP EliteDisplay E242 24" Monitor No. TL16003, dated Feb 1, 2016

4. APPLICATION / LIMITATION:

- 4.1 - BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - BUREAU VERITAS Environmental Category, **EC Code: 41B**
- 4.4 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.5 - Each display must be used in conjunction with the appropriate Mariner Systems Kits listed in §1.
- 4.6 - For use in Navigation (Display not covered by IEC 62288), Control, Loading Instrument & General Purpose Applications (except ECDIS).
- 4.7 - The minimum safe distance at which the equipment may be mounted from a standard or a steering magnetic compass is not to be less than 600mm.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above product are to be supplied by **MARINER SYSTEMS (UK) Ltd.** in accordance with the type described in this certificate.

5.2 - This type of product is within the category DBV of Bureau Veritas Rule Note NR320.

5.3 - **MARINER SYSTEMS (UK) Ltd.** has declared to Bureau Veritas the following production site(s):

Mounting Kits:

MARINER SYSTEMS (UK) Ltd.

Oaklands Park

Wokingham

Berkshire

RG41 2FD

UNITED KINGDOM

Monitor:

HEWLETT PACKARD

PO Box 692000

Houston

Texas

77269-2000

UNITED STATES OF AMERICA

6. MARKING OF PRODUCT:

- Maker's name or trade mark.
- Serial number of the unit.
- Equipment type or model identification under which it was type-tested.

7. OTHERS:

It is **MARINER SYSTEMS (UK) Ltd.** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***