



MARINE DIVISION

Certificate number: 22643/A0 BV

File number: AP4170

Product code: 4483H

*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 LA1905wg 19-inch Widescreen TFT Monitor

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships

*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: 28 Feb 2016**

**For BUREAU VERITAS,**

At BV LONDON, on 28 Feb 2011,

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 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 SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

#### **HP 19" TFT Colour Display - LA1905wg**

The Hewlett-Packard 19" TFT Colour Widescreen Display (LA1905wg) must be used in conjunction with the appropriate Mariner Systems Kits:

MS1210 - Desktop mounted  
MS1215 - Wall mounted  
MS1220 - Console / Rack mounted

### 2. DOCUMENTS AND DRAWINGS :

HP LA1905wg 19-inch Widescreen LCD Monitor QuickSpec DA13441 Version 4 dated 30th October 2009.  
Mariner Systems drawing MS1210\_A Issue 1 dated 29th November 2009.  
Mariner Systems drawing MS1215\_A Issue 1 dated 29th November 2009.  
Mariner Systems drawing MS1220\_A Issue 1 dated 29th November 2009.

### 3. TEST REPORTS :

Mariner Systems (UK) Ltd. environmental test report TL1349 dated 12th December 2009.

### 4. APPLICATION / LIMITATION :

- 4.1 - Each display must be used in conjunction with the appropriate Mariner Systems Kits: MS1210 , MS1215 or MS1220.
- 4.2 - According to BUREAU VERITAS Rules for the Classification of Steel Ships.
- 4.3 - Approval valid for ships intended to be granted with the notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.4 - For use in Navigation, Control, Loading Instrument & General Purpose Applications (except ECDIS).
- 4.5 - BUREAU VERITAS Environmental Category: **31C**
- 4.6 - The equipment fulfils the EMC requirements for installation on the Bridge and weather-protected Deck zones.

### 5. PRODUCTION SURVEY REQUIREMENTS :

- 5.1 - The HP 19" TFT Colour Widescreen Display - LA1905wg is to be manufactured, examined and tested by **HEWLETT PACKARD** in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.
- 5.2 - The supporting Mariner Kits are to be manufactured, examined and tested by **MARINER SYSTEMS (UK) LTD** in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.
- 5.3 - Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end **MARINER SYSTEMS (UK) LTD** has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.
- 5.4 - **MARINER SYSTEMS (UK) LTD** has declared to Bureau Veritas that the type of product described in this certificate is manufactured at the following production sites:

Mounting Kits:  
**MARINER SYSTEMS (UK) LTD**  
Oaklands Park  
Wokingham  
Berkshire  
UNITED KINGDOM

Monitor:  
**HEWLETT PACKARD**  
PO Box 692000  
Houston  
Texas  
77269-2000  
UNITED STATES OF AMERICA

- 5.5 - Each equipment is to be supplied with manual(s) for installation, use and maintenance.

### 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 :**

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the Personal Computers at any time, and that **MARINER SYSTEMS (UK) LTD, Wokingham - United Kingdom**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

**\*\*\* END OF CERTIFICATE \*\*\***