



Marine & Offshore

Certificate number: 74084/A0 BV

File number: MPA2204297

Product code: 4482H

*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*

**MARITIME PERSONAL COMPUTERS**

HP Elite 800 G9

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 31/41 B

*This certificate is issued to attest that Bureau Veritas Marine & Offshore 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: 03 Apr 2028**

**For Bureau Veritas Marine & Offshore,**

At BV LONDON, on 03 Apr 2023,

Spencer Yule

***This certificate was created electronically and is valid without signature***



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 Marine & Offshore. 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 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 Marine & Offshore 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/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=hw49z62hd8>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

- Product model or type description:

**HP Elite 800 G9**

- Product description:

HP Elite 800 G9 Desktop PC (SFF & TWR).

The HP Elite 800 G9 Tower (TWR) Personal Computer must be installed in conjunction with the appropriate Mariner Systems Kit:

- MS2650 – for desktop configuration
- MS2660 – for tower configuration

The HP Elite 800 G9 Small Form Factor (SFF) Personal Computer must be installed in conjunction with the appropriate Mariner Systems Kit:

- MS2670 – for horizontal mount
- MS2680 – for vertical mount

### 2. DOCUMENTS AND DRAWINGS :

#### **Mariner Systems (UK) Ltd.:**

- HP Elite 800 G9 QuickSpecs N° c08017769 - DA17000 - Version 28, dated 27 Oct 2022.
- HP Elite 800 G9 PC series Component Options, dated 21 Nov 2022.
- Drawing of filter RF 1004-MST-C N° DS 103-MST, Issue 2, dated 30 Jan 2020.
- Assembly drawing N° MS2650\_A, Issue 1, dated 14 Nov 2022.
- Assembly drawing N° MS2660\_A, Issue 1, dated 14 Nov 2022.
- Assembly drawing N° MS2670\_A, Issue 1, dated 14 Nov 2022.
- Assembly drawing N° MS2680\_A, Issue 1, dated 14 Nov 2022.
- Mariner Systems Marine Test Requirements Issue 16, dated May 2022.

### 3. TEST REPORTS :

#### **MS Testing:**

- Test report N° TL22277, dated 17 Nov 2022.
- Test report N° TL22296, dated 17 Nov 2022.

### 4. APPLICATION / LIMITATION :

4.1 - BUREAU VERITAS Rules 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: 31/41 B.**

4.4 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.

4.5 - The minimum safe distance at which the equipment may be mounted from a standard or a steering magnetic compass is:

	<b>HP Elite 800 G9 TWR</b>	<b>HP Elite 800 G9 SFF</b>
1 Degree Deflection	800 mm	700 mm
0.3 Degree Deflection	1000 mm	1000 mm

4.6 - In order to lower the conducted emissions, the power supplies of equipment listed in clause 1, shall be fitted with appropriate on line filter RF 1004-MST-C.

4.7 - Screened Ethernet cables should be used in order to comply with the requirement of the EMC test.

4.8 - In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of Category II or III, for each ship application:

- Ship specific documentation is to be submitted including software documentation and categorization of the computer based system.

- Inspection and testing before installation onboard is to be performed under the surveillance of the Society.

4.9 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 8.

**5. PRODUCTION SURVEY REQUIREMENTS :**

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

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **MARINER SYSTEMS (UK) Ltd** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products

5.4 - For information, **MARINER SYSTEMS (UK) Ltd** has declared to Bureau Veritas the following production site(s):

**MARINER SYSTEMS (UK) Ltd**  
**Oaklands Park**  
**RG41 2FD Wokingham**  
**Berkshire**  
**UNITED KINGDOM**

**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**'s 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 \*\*\*