

Confirmation of Product Type Approval

Company Name: MARINER SYSTEMS UK LTD

Address: OAKLANDS PARK, WOKINGHAM, United Kingdom, RG41 2FD

Product: Computer System

Model(s): HP EliteDesk 800 G6 Small Form Factor (SFF) and Tower (TWR)

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	21-2115572-PDA	29-APR-2021	28-APR-2026
Manufacturing Assessment (MA)	20-4451837	13-OCT-2020	04-NOV-2025
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

Navigation, Control, Loading and General Purpose Applications on ABS Classed Vessels and Offshore Facilities in accordance with the listed ABS Rules and International Standards.

Description

The HP EliteDesk 800 G6 Small Form Factor (SFF) and Tower (TWR) PC is to be installed and used in conjunction with Mariner Kit MS2610, MS2620, MS2630 or MS2640.

The mounting device is environmentally tested for use with the HP EliteDesk 800 G6 Small Form Factor (SFF) and Tower (TWR) PC in marine and offshore environment.

The mounting device is fitted with bespoke anti-vibration mounts together with an in-line power filter RF 1004-MST-C as detailed in the assembly drawing.

HP EliteDesk 800 G6 PC main components:

1) Processors (CPU) up to and including Intel Core i7, Core i5, Core i3 or Intel Pentium with 3.7GHz (4.8GHz turbo) frequency, 16MB cache, 8 cores

2) Memory up to 128 GB DDR4-2666 DIMM, Intel Optane Memory 16GB (cache)

3) Hard Disk up to 2TB M.2 2280 PCIe NVMe TLC SSD

4) Optical Drive HP ODD 9.5mm DVD Writer, HP ODD 9.5mm DVD-ROM

5) Intel HD Graphics (integrated), NVIDIA Quadro P620 2GB (PCIe x16), NVIDIA Quadro P400 2GB (PCIe x16), NVIDIA GeForce GT730 2GB (PCIe x8), AMD Radeon RX 550X 4GB (PCIe x16), AMD Radeon R7 430 2GB 2DP (PCIe x16)

Other components as per document: HP 800 G6 Components Options - History, dated 9 March 2021.

Operating system Windows 10 Professional (64-bit), Windows 10 Home Plus (64-bit), Windows 10 Home (64-bit), FreeDOS 2.0.

Ratings

Rated Voltage: 230 VAC, 50Hz, 115 VAC, 60Hz, 100VAC, 50Hz

Operating Temperature: 10 °C up to 35 °C

Service Restrictions

1) Unit Certification is not required for this product.

2) If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

3) Test and approval for this product are for hardware only and no functionality is covered is this PDA. Where this product is used as a part of computer-based system category II or III, each application/configuration is to be specifically approved.

4) The use of product is permitted in spaces that are environmentally controlled.

Comments

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes, Drawings and Documentation

Drawing No. 1004-MST-C, Filter Type RF 1004-MST-C, Revision: -

Drawing No. Components Options, HP ED 800 G6 Component Options Mar 21, Revision: -

Drawing No. MS2610_A, MS2610 Assembly Drawing, Revision: -

Drawing No. MS2620_A, MS2620 Assembly Drawing, Revision: -

Drawing No. MS2630_A, MS2630 Assembly Drawing, Revision: -

Drawing No. MS2640_A, MS2640 Assembly Drawing, Revision: -

Drawing No. QuickSpec, HP ED 800 G6 QuickSpec v.17, Revision: -

Drawing No. HP ED 800 G6 TWR PC MS Testing Laboratory Test Report No. TL21006, Revision: -

Drawing No. HP ED 800 G6 SFF PC MS Testing Laboratory Test Report No. TL21109, Revision: -

Drawing No. Marine Type Approval Test Requirements Issue 15, Revision: -

Drawing No. UKAS Schedule, UKAS Schedule of Accreditation Issue 23, Revision: -

Drawing No. UK010572, ISO 9001 Certificate, Revision: -

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 28/Apr/2026 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting

design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules

Rules for Conditions of Classification, Part I - 2021 - 1 - 1 - 4/7.7, 1 - 1 - A3, 1 - 1 - A4, which covers the following:

2021 Marine Vessels Rules: 4-8-3/1.7, 4-8-3/1.17, 4-9-9/13.1, 4-9-9/15.7 Table 1

Rules for Conditions of Classification, Part I - 2021 – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2021 Rules for Building and Classing Mobile Offshore Units: 6-1-1/9

International Standards

IACS UR E10 rev. 7: 2018 IEC 60945 Ed. 4.0: 2002

EU-MED Standards NA

National Standards

Government Standards

Other Standards



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Corporate ABS Programs American Bureau of Shipping Print Date and Time: 04-May-2021 3:01

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and

Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.