



TYPE APPROVAL CERTIFICATE
No. ELE013423XG

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	Personal computer
<i>Type</i>	HP ELITE 800 G9 PC Series
	Used in Conjunction with Mariner Kit MS2650, MS2660, MS2670 or MS2680
<i>Applicant</i>	MARINER SYSTEMS UK LTD
	OAKLANDS PARK WOKINGHAM BERKSHIRE RG41 2FD
	UNITED KINGDOM
<i>Manufacturer</i>	HEWLETT PACKARD
<i>Place of manufacture</i>	1501 Page Mill Road, Palo Alto, CA 94303
	1112
	UNITED STATES OF AMERICA
<i>Reference standards</i>	Rules for the classification of ships.- Part C - Machinery, systems and fire protection. - Ch.3, Sect. 6, Table 1.

Issued in **Hamburg** on **February 9, 2023**. *This Certificate is valid until* **February 8, 2028**

RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure

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HP ELITE 800 G9 PC Series

Used in Conjunction with Mariner Kit MS2650, MS2660, MS2670 or MS2680

Product description:

The HP Elite 800 G9 PC series are personal desk computer for marine environmental conditions in conjunction with Mariner Kits.

Technical specification:

Processor:

All processors up to and including Intel Core i7, Core i5, Core i3 with 3.3GHz (4.9GHz turbo), 25MB cache, 12 cores.

Memory:

Up to 128 GB DDR5-4800 DIMM

Hard Disk:

- 2TB M.2 2280 PCIe NVMe TLC SSD
- 1TB M.2 2280 PCIe NVMe TLC SSD
- 512GB M.2 2280 PCIe NVMe TLC SSD
- 256GB M.2 2280 PCIe NVMe TLC SSD
- 512GB M.2 2280 PCIe NVMe SSD
- 256GB M.2 2280 PCIe NVMe SSD
- 2TB SATA-6G 3.5" (7200 rpm)
- 1TB SATA-6G 3.5" (7200 rpm)
- 500GB SATA-6G 3.5" (7200 rpm)
- 1TB SATA-6G 2.5" (7200 rpm)
- 500GB SATA 2.5" (7200 rpm)
- 500GB SATA 2.5" SED Opal 2 (7200 rpm)

Optical Drive:

- HP ODD 9.5mm DVD Writer
- HP ODD 9.5mm DVD-ROM

Graphics Card:

- AMD Radeon R7 430 2GB 2DP (PCIe x16)
- AMD Radeon RX 550X 4GB (PCIe x16)
- Intel UHD Graphics (integrated)
- NVIDIA GeForce GT 730 2GB (PCIe x8)
- NVIDIA Quadro P400 2GB (PCIe x16)
- NVIDIA Quadro P620 2GB (PCIe x16)
- NVIDIA T400 4GB w/2 mDP-to-DP (PCIe x16)
- NVIDIA T1000 8GB 4mDP (PCIe x16)

Network Interface Card:

- Intel Ethernet I210-T1 GbE NIC (PCIe x1)
- Intel Ethernet I350-T4 1GB 4-port NIC
- Intel Wi-Fi 6 AX201 ax 2x2 vPro +Bluetooth 5 WW
- Intel Ethernet I219LM GbE LOM Network Connection (integrated)
- Intel I255-T1 GbE NIC (PCIe x1)
- Intel I350-T2 GbE NIC (PCIe x1)

Keyboard:

- HP PS/2 Business Slim Keyboard
- HP USB Keyboard
- HP USB Business Slim Keyboard
- HP USB 320K Keyboard

Mouse:

- HP PS/2 Mouse
- HP USB Optical Mouse
- HP Wired 320M Mouse
- HP USB Black 125 Wired Mouse
- HP USB 1000dpi Laser Mouse
- Kensington Orbit Trackball with Scroll Ring

Miscellaneous:

- HP SD 4 Media Card Reader
- HP Type-C USB 3.1 Gen2 Port
- HP DisplayPort to HDMI True 4K Adapter
- HP DisplayPort Port
- HP Serial Port Rear Wall
- HP Serial/ PS/2 Module
- HP VGA Port
- HP DisplayPort to DVI-D Adapter
- HP DisplayPort to VGA Adapter
- HP Serial Port
- HP PCIe x1 Parallel Port Card

Operating system: (Not in scope of Society)

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HP ELITE 800 G9 PC Series

Used in Conjunction with Mariner Kit MS2650, MS2660, MS2670 or MS2680

Mariner Kits used in conjunction with HP Elite 800 G9 SFF & TWR PC:

MS2650 Assembly, Desktop configuration

MS2660 Assembly, Tower configuration

MS2670 Assembly, Horizontal mount

MS2680 Assembly, Vertical mount

Documents:

Data sheet: - 1004-MST-C

Drawings: - MS2650,A,1; MS2660,A,1; MS2670,A,1; MS2680,A,1;

Specification: - HP Elite 800 G9 QuickSpec v.28

Test Reports:

TL22277, MS Testing, dated 17 November 2022,

TL22296, MS Testing, dated 17 November 2022,

Remarks:

- The products fulfill **EC-Code: 31**.

- The EMC requirements for installation on the Bridge and Deck Zones will be fulfilled by the equipment if in-line power filter: RF 1004-MST-C will be used.

- HP Elite 800 G9 TWR PC: Steering, Standby and Emergency Compass Safe Distance 1.0 Degree deflection: 800 mm Standard Compass

Safe Distance 0.3 Degree deflection 1000mm

- HP Elite 800 G9 SFF PC: Steering, Standby and Emergency Compass Distance 1.0 Degree deflection: 700mm Standard Compass

Safe Distance 0.3 Degree deflection 1000mm

- Documents relating to each application are to be submitted to the Society's examination prior fitting on board.

Hamburg February 9, 2023

