

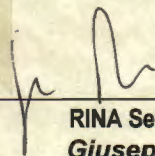


**TYPE APPROVAL CERTIFICATE**  
No. **ELE003319XG**

**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>	<b>Personal computer</b>
<i>Type</i>	<b>HP ELITE DESK 800 G4 SFF &amp; TWR PC In Conjunction with Mariner Kit MS2510, MS2520, MS2530 or MS2540</b>
<i>Applicant</i>	<b>MARINER SYSTEMS UK LTD OAKLANDS PARK WOKINGHAM BERKSHIRE RG41 2FD UNITED KINGDOM</b>
<i>Manufacturer</i>	<b>HEWLETT PACKARD</b>
<i>Place of manufacture</i>	<b>20555 SH249 HOUSTON, TX 77070 UNITED STATES OF AMERICA</b>
<i>Reference standards</i>	<b>Rules for the classification of ships.- Part C - Machinery, systems and fire protection. - Ch.3, Sect. 6, Table 1.</b>

Issued in **Hamburg** on **May 9, 2019**. This Certificate is valid until **May 8, 2024**

  
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RINA Services S.p.A.  
**Giuseppe Russo**

This certificate consists of this page and 1 enclosure



**TYPE APPROVAL CERTIFICATE**

No. ELE003319XG

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**HP ELITE DESK 800 G4 SFF & TWR PC****In Conjunction with Mariner Kit MS2510, MS2520, MS2530 or MS2540****...Product description:**

The HP EliteDesk 800 G4 PC series are personal PCs for marine environmental conditions if Mariner Kits are installed.

**Technical specification:**

<b>Processor:</b>	
All processors up to and including Intel Core i7, Core i5, Core i3 or Intel Pentium with 3.7GHz (4.6GHz turbo) frequency, 12MB cache, 6 cores	
<b>Memory:</b>	
Up to 64 GB DDR4-2666 DIMM	
<b>Hard Disk:</b>	
- 512GB M.2 2280 PCIe NVMe TLC SSD - 256GB M.2 2280 PCIe NVMe TLC SSD - 128GB M.2 2280 PCIe TLC SSD - 512GB M.2 2280 PCIe NVMe SSD - 256GB M.2 2280 PCIe NVMe SSD - 1TB PCIe-3x4 NVMe TLC 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) - 256GB SATA 2.5" SED Opal 2 TLC SSD - 256GB SATA 2.5" SSD
<b>Optical Drive:</b>	
- HP ODD 9.5mm DVD Writer	- HP ODD 9.5mm DVD-ROM
<b>Graphic Card:</b>	
- Intel HD Graphics (integrated) - NVIDIA Quadro P400 2GB (PCIe x16)	- AMD Radeon R7 430 2GB 2DP (PCIe x16)
<b>Network Interface Card:</b>	
- Intel Ethernet I210-T1 GbE NIC (PCIe x1)	- Intel Ethernet I219LM GbE LOM Network Connection (integrated)
<b>Keyboard:</b>	
- HP PS/2 Business Slim Keyboard	- HP USB Business Slim Keyboard
<b>Mouse:</b>	
- HP PS/2 Mouse - HP USB Optical Mouse	- HP USB 1000dpi Laser Mouse - HP USB Hardened Mouse
<b>Miscellaneous:</b>	
- HP SD 4 Media Card Reader - HP Type-C USB 3.1 Gen2 Port - HP DisplayPort to HDMI True 4K Adapter - HP 800 G4 TWR Dust Filter - HP 800 G4 SFF Dust Filter - HP Serial Port Rear Wall - HP Serial / PS/2 Module	- HP Parallel Port Card (PCIe x1) - HP VGA Port - HP HDMI Port - Moxa 4-Port RS-232/422/485 Serial Card (PCIe x1) - HP DisplayPort to DVI-D Adapter - HP DisplayPort to VGA Adapter - HP DisplayPort Cable
<b>Operating System:</b>	
Not related to the scope of classification.	
<b>Mariner Kits used in conjunction with HP EliteDesk 800 G4 PC Series:</b>	
- MS2510,A, Assembly, Desktop Configuration - MS2520,A, Assembly, Tower Configuration	- MS2530,A, Assembly, Horizontal Mount - MS2540,A, Assembly, Vertical Mount



**TYPE APPROVAL CERTIFICATE**  
**No. ELE003319XG**  
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**HP ELITE DESK 800 G4 SFF & TWR PC**  
**In Conjunction with Mariner Kit MS2510, MS2520, MS2530 or MS2540**

**Documents:**

3MQ82AA, Technical Specification AMD Radeon R7 430 2GB LP 2DP PCIe x16 v 2;  
Datasheet: 1004-MST-C; CP-114EL,EL-I; NVIDIA Quadro P400 2GB PCIe x16;  
HP 800 G4 Components Options Nov 18;  
HP EliteDesk 800 G4 Quick Specification Rev17;  
Dimension Drawing: MS2510 A 1; MS2520 A 1; MS2530 A 1; MS2540 A 1;

**Test Reports:**

MS Testing: TL18114, HP EliteDesk 800 G4 TWR PC 1, Issue 1 dated 21/11/2018;  
TL18115, HP EliteDesk 800 G4 SFF PC 1, Issue 1 dated 21/11/2018; TL18116,  
HP EliteDesk 800 G4 SFF PC 2, Issue 1 dated 21/11/2018;

**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, RF 1004-MST-B, or RF 1004-MST-C will be used.
- HP EliteDesk 800 G3 TWR PC: Steering, Standby and Emergency Compass Safe Distance 1.0 Degree deflection: 600 mm  
Standard Compass Safe Distance 0.3 Degree deflection: 700 mm
- HP EliteDesk 800 G3 SFF PC: Steering, Standby and Emergency Compass Safe Distance 1.0 Degree deflection: 600 mm  
Standard Compass Safe Distance 0.3 Degree deflection: 700 mm
- Documents relating to each application are to be submitted to the Society's examination prior fitting on board.

**Hamburg May 9, 2019**

