

Type Approval Certificate



This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. **86 101 - 09 HH**

Company **Mariner Systems (UK) Ltd.
Oaklands Park
Wokingham, Berkshire RG41 2FD, UNITED KINGDOM**

Product Description **Workstation**

Type **HP Z400
used with Mariner Kit MS3010 and MS3020**

Environmental Category **C; EMC1**

Technical Data /
Range of Application **HP Z400 used with Mariner Kit MS3010 (Desktop configuration) and MS3020 (Minitower configuration)
Processor:
Intel Xenon W3570 (3.20/1333/8M)
Intel Xenon W3540 (2.93/1066/8M)
Intel Xenon W3520 (2.66/1066/8M)
Intel Xenon W3505 (2.53/1066/4M)
Intel Xenon W3503 (2.40/1066/4M)

Memory: 1GB to 16 GB DDR3-1333 ECC Unbuffered RAM
Hard Disk Drive: 500, 250 and 500GB SATA 3.0 Gb/s (7200 rpm) or 146 GB SAS 3.0 Gb/s (7200 rpm)
Optical Drive: SATA DVD 16x DVD+ RW Super Multi Drive ; SATA DVD 16x DVD-ROM Drive
Floppy Drive: 3,5" NK360AA**

Test Standard **Guidelines for the Performance of Type Approvals VI-7-2, Edition 2003
Regulations for the Use of Computers and Computer Systems**

Documents **Test report: No. TL1313 dated 18-06-2009,
Specification DA-13276 Version 1 dated 30-03-2009; Drawing MS3020_A ASSEMBLY dated 05-06-2009 and MS3010_A ASSEMBLY dated 23-06-2009
HPZ400-Components dated 07-03-2009**

Remarks **None**

Valid until **2014-11-19**

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File No. **I.B.05**

Hamburg, 2009-11-20

Type Approval Symbol



Germanischer Lloyd

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This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".

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Graphics Card :
NVIDIA Quadro NVS 290 256MB DH PCIe x 16
NVIDIA Quadro FX 380 256MB DH PCIe x 16
NVIDIA Quadro FX 1800 768MB DH PCIe x 16
NVIDIA Quadro FX 4800 1.5 GB DH PCIe x 16

Network Interface:
Integrated Broadcom 5764 PCIe LOM Controller
Broadcom NetXtreme Gigabit Plus PCIe NIC

Keyboard: HP PS/2 Standard; HP USB Standard
Mouse: HP PS/2 2-Button Optical Scroll; HP USB 2-Button Optical Scroll

Software Version Operating System:
Windows Vista Business 64, Vista Business 32, Vista Business 64 with downgrade to Windows XP Professional 64
Vista Business 32 with downgrade to Windows XP Professional 32
Linux
Novell Suse SLED 11

Tests and Evidence regarding Requirement Class 3

Power Supply: 475 Watt wide-ranging, active Power Factor Correction; 85% Efficient; No. 468930-001

Miscellaneous:
HP 22-in-1 Media Card Reader
HP 2nd Serial Port Adapter
HP FireWire IEEE 1394 PCI card
LSI 3041E 4-port SAS 3.0 Gb/s Raid Card
HP eSATA PCI Cable Kit
Intel 64 BG SATA SSD 3.0Gb/s

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