

Manufacturer: **Hatteland Technology AS**  
 Product: **4U Rackmount Marine Server / Computer**  
 Typenumber: **HTS41x11-xyyyy-AC Azzzzz**  
 Where "y" = CPU and "z" = Configurations

Last Revised: **09 Sep 2025**  
 Revision#: **25**

## 4U Rackmount Marine Server / Computer

### Overview:

The HTS41x11 4U series industrial & marine certified 19" rack servers are designed with latest Xeon architecture. A huge variety of I/O such as NMEA 0183 ports, serial interface, USB, Gigabit Ethernet ports, PCIe slots for extensions, High end Nvidia graphics, will fulfill a wide range of industrial and maritime applications. Supports up to 10 x 2.5" SSD storage devices, Rugged and ready for most critical and harsh installations. Short depth of chassis makes this system perfect for installations where the available space is limited.

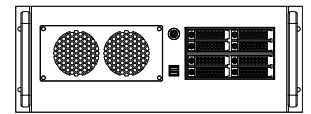
- High Performance Intel® C622 Chipset - Intel® Xeon Gold/Silver available
- Rugged "SHORT" chassis
- 19 inch rack 4U and table mount
- Wide range of approved options for: Professional Nvidia Graphics Cards, Network\*, COM Ports (RS422/485/232,CAN)
- Digital I/O
- Storage
- Flexible design
- Fully IEC 60945/IACS E10 tested, DNVGL-CG-0339

\*10GbE Network functionality is also available onboard or as an additional PCIe 3.0 x16 card with either SFP+ or RJ-45 connectivity.

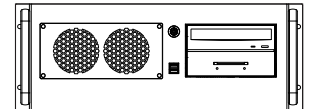


### Factory Options:

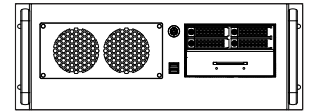
#### 8-bay



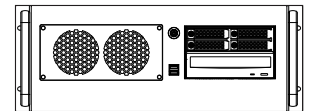
#### DVD-RW/CD-RW + Smart Card Reader



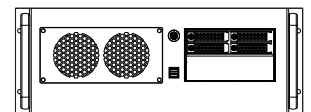
#### 4-Bay + Smart Card Reader



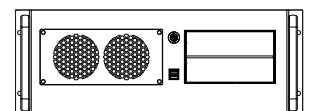
#### 4-bay + DVD-RW/CD-RW



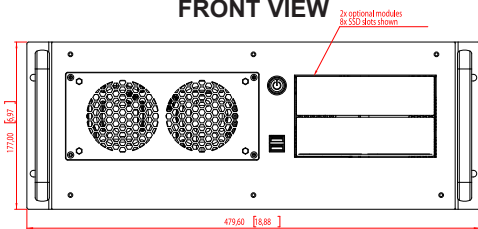
#### 4-bay



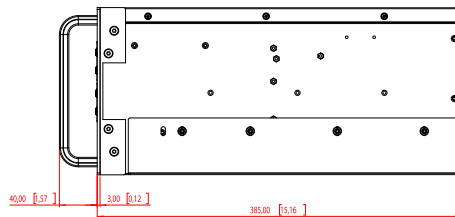
#### None



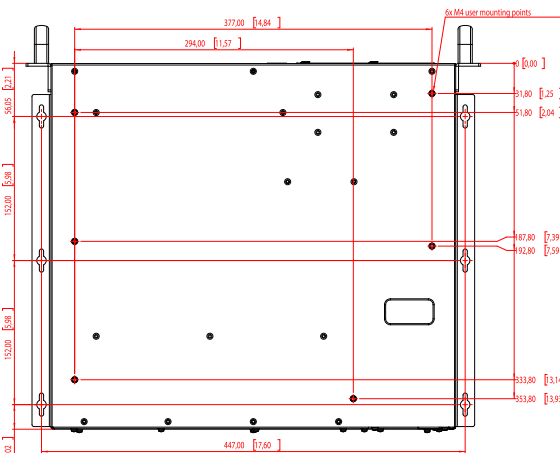
### FRONT VIEW



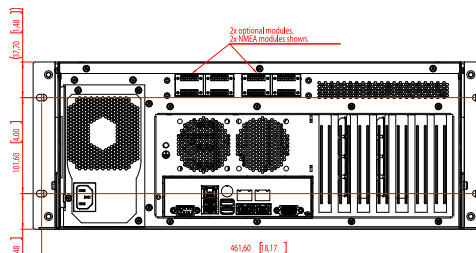
### SIDE VIEW



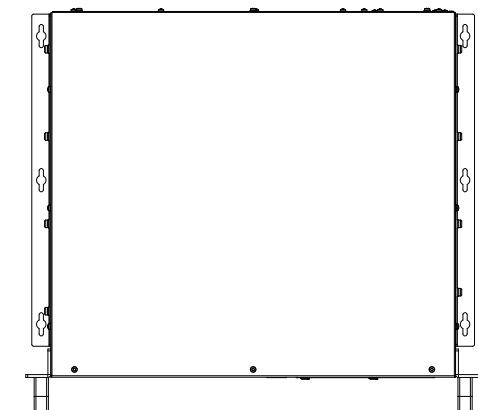
### TOP VIEW



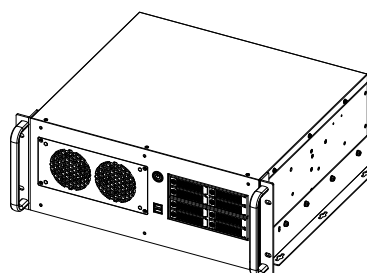
### BACK VIEW



### BOTTOM VIEW



### DIMETRIC VIEW



Dimensions might be shown with or without decimals and indicated as mm [inches]. Tolerance on drawings is +/- 1mm. For accurate measurements, check relevant DWG file.

## TECHNICAL DESCRIPTION

### Computer Specifications:

• Motherboard	: Supermicro X11SPI-TF, Industrial long-life Server board	
• System Chipset	: Intel® C622	
• Operating System	: See table below for options	
• Processor	: See table below for options	
• Memory/RAM	: See table below for options	
• Storage Devices internal	: 2 x 2.5", See table below for options	
• Storage Devices in Front	: 4 x or 8 x 2.5" Sized Tray, Hot-Swap drawers/removable tray, see table below (standard: 4 x removable trays)	
• PCIe Slots	: 1 x PCIe 3.0 x16 1 x PCIe 3.0 x16 (x16 or x8)* 1 x PCIe 3.0 x8 (x0 or x8)* 1 x PCIe 3.0 x8 1 x PCIe 3.0 x4 (in x8)	
• Graphics Chipset Onboard	: 1 x Internal VGA (Aspeed AST2500), Max Resolution: 2048x1536	1 x VGA - DB15F
• Graphics Card (Optional)	: See table below	
• BIOS	: AMI UEFI	
• Audio	: None	
• Ethernet Onboard	: 2 x 10 GBase-T (Intel®)	2 x RJ-45
• USB Ports	: 2 x USB2.0 (<5m) ports (rear) 2 x USB3.0 (<3m) ports (rear) + 2 x USB3.0 (<3m) ports (front)	2 x USB Type A 4 x USB Type A
• Mouse/Keyboard Port	: None	
• Serial Ports	: 1 x RS-232 (1 x rear I/O)	1 x DB9M
• Power Manager	: ACPI	
• Watchdog Timer	: 256 Segments, 0, 1, 2...255 sec/min	
• RTC	: YES	
• H/W Status Mont.	: YES	
• IPMI	: ASPEED AST2500	
• Other	: TPM 2.0 (Default) - P/N: AOM-TPM-9670H, Firmware Raid	

### External Connector Type:

### Power Specifications:

\*If the 2<sup>nd</sup> PCIe slot is x16 the 3<sup>rd</sup> slot will be x0, If the 2<sup>nd</sup> PCIe slot is x8 the 3<sup>rd</sup> slot will be x8

#### Power Supply:

• 100-240V AC 50-60Hz: 700W - Autorange 1 x Std. IEC inlet Power Consumption - Operating: 875 (max)

#### Optional Power Supply:

• 100-240V AC 50-60Hz: 1200W - Autorange 1 x external filter HD XPF SDT A1 Power Consumption - Operating: 1200W (max)

### Available Computer Configurations:

Type	Description	Size/Specification
Processor	1 x Intel® Xeon® Gold 6230R Processor** 1 x Intel® Xeon® Gold 6230 Processor** 1 x Intel® Xeon® Gold 6226R processor** 1 x Intel® Xeon® Silver 4216 Processor* 1 x Intel® Xeon® Silver 4210 Processor* 1 x Intel® Xeon® Silver 4215R Processor* *Max speed for DDR4 memory: 2400Mhz. **Max speed for DDR4 memory: 2933Mhz.	26-Core 2.10GHz - 4.00GHz, 35.75MB Cache 20-Core 2.10GHz - 3.90GHz, 27.5MB Cache 16-Core 2.90GHz - 3.90GHz, 22MB Cache 16-Core 2.10GHz - 3.20GHz, 22MB Cache 10-Core 2.20GHz - 3.20GHz, 13.75MB Cache 8-Core 3.20GHz - 4.00GHz, 11MB Cache
Memory	DDR4 RDIMM, 288-pin 1.2V-3200MHz Registered ECC, 8 slots available	- 32GB memory modules
Storage	2.5" SSD SATA	- 240GB (0.9PBW), 480GB (1.2PBW), 960GB (3.4PBW), 1.92TB (7.1PBW) *contact sales for larger SSD capacity
Storage 1	1 to 4 x 2.5" SSD SATA3/SAS front drive bay	- Intel® SSD 24/7 Datacenter series
Storage 2	1 to 8 x 2.5" SSD SATA3 (6Gbps), Multi Level (MLC)	- Intel® SSD 24/7 Datacenter series
OS 64bit options	Windows 10 IoT 2021 LTSC, Microsoft® Windows® Server 2016, Microsoft® Windows® Server 2019, Linux (Kernel 4.8 or later version)	
	• None, i.e. covered with blinds	• 90DD01Y0-B20010, DVD-RW/CD-RW
	• CST-US777AK9563, Smart card reader	• MB994SK-1B, 4x2.5" SATA drive bay

### Factory Mounted Options:

- NVIDIA T400: PCIe 3.0 x16, 3x mini DP, 4 GB GDDR6
- NVIDIA T1000: PCIe 3.0 x16, 4x mini DP, 8 GB GDDR6
- NVIDIA RTX 4000 Ada: PCIe 4.0 x16, 4x DP 1.4a, 20 GB GDDR6 \*Pending
- NVIDIA RTX 5000 Ada: PCIe 4.0 x16, 4x DP 1.4a, 32 GB GDDR6 \*Pending
- X710T2L / X710T2LBLK: Intel® Network Adapter (10GbE), 2 x RJ45
- I350T4V2 / I350T4V2BLK: Intel® Network Adapter (1GbE), 4 x RJ45
- X710DA2 / X710DA2BLK: Intel® Fiber Network Adapter (10GbE), 2 x SFP+
- X710DA4 / X710DA4BLK: Intel® Fiber Network Adapter (10GbE), 4 x SFP+
- PCA100309-1: Dual Isolated RS-232 module
- CP-114EL-1 ELEK KIT: 4xCOM, PCIe x1, 1xDB44F to 4xDB9M isolated, RS-232/422/485)
- AOM-TPM-9671H: TPM 1.2
- PCA100309-1: Dual Isolated RS-232 module
- PCA200828-2: COM RS-422/485 isolated module, NMEA 4 channel

### Available Accessories:

- HT 00225 OPT-A1: 2 x 26" ball bearing sliding rail & mounting kit for 19" Rack
- HT 00224 OPT-A1: 2 x 20" ball bearing sliding rail & mounting kit for 19" Rack
- HT MBK STD-G1: 1 x Mounting Bracket Kit for HTS31xxx and HTS41xxx - L-Shaped
- E10GSFSPSR: 1 x Intel® Ethernet SFP+ Sr Optics
- E10GSFSPSRX: 1 x Intel® Ethernet SFP+ Sr(x) Optics
- E10GSFPLR: 1 x Intel® Ethernet SFP+ LR Optics
- HT 00262 OPT-A1: 4 x RS-422/RS-485 isolated, USB external module
- HT 00263 OPT-A1: 4 x RS-232 COM non-isolated, USB external module
- HT 00264 OPT-A1: 1 x CAN isolated, 2 channel, USB external module
- HT 00264 OPT-A2: 1 x CAN isolated, 2 channel, socketCAN USB ext. module
- HT 00273 OPT-A1: 4 x Digital IN/OUT isolated, USB external module
- HT 00274 OPT-A1: 2 x LAN 10/100Mbps, RJ45, USB external module
- QSP-MINIDP/DPV3: DP adapter for Nvidia Graphics Card
- ZA-A390: Mini DP to DVI(female)
- ZA-A391: Mini DP to HDMI(female)

## MECHANICAL DESCRIPTION

### Environmental Considerations:

• Operating	: Temperature -15°C to +55°C
• Storage	: Temperature -20°C to +70°C
• Humidity	: Up to 95% (Operating / Storage)
• Shock - Vibration	: 5g/11ms - 0.7g (IEC 60945 / IACS E10)
• Air Pressure Maximum Altitude	: Operating: 4000m - Storage: 12912m
• Air Pressure Maximum Altitude (Bonded)	: Operating: 3000m - Storage: 3000m
• Compass Safe Distance	: Standard: 300cm - Steering: 180cm

### Physical Specifications:

- W:479.60 [18.88"] x H:177.00 [6.97"] x D:383.00 [15.08"] mm [inch] (w/handles)
  - Weight: Approx 14.5 kg / 31.9lbs
  - Black (EP0301-4040627) Heavy-duty steel 4U Rackmount chassis with handles
  - 2 x Internal Cooling fans in front (80x80mm)
  - Easy Removable Front Air Filter (spare part accessory available)
  - Power Button, Power LED, Activity LEDs SSD
- Product Carton Size and Weight:**
- L:610.00 [24.02"] x W:570.00 [22.44"] x H:360.00 [14.17"] mm [inch]
  - Approx. 15.0 kg / 33.0 lbs

### Lifetime Considerations:

Even though the test conditions for bridge units provide for a maximum operating temperature of 55°C, continuous operation of all electronic components should, if possible, take place at ambient temperatures of only 25°C. This is a necessary prerequisite for long life and low service costs.

## APPROVALS & CERTIFICATES

These products have been tested / type approved by the following classification societies:

**IEC 60945 4th (EN 60945:2002)**  
**CCS** - China Classification Society  
**LRS** - Lloyd's Register of Shipping

**IACS E10**  
**KR** - Korean Register

**EU-RO-MR** - Mutual Recognition by DNV  
**BV** - Bureau Veritas

**ABS** - American Bureau of Shipping  
**ClassNK** - Nippon Kaiji Kyokai