

# DATA SHEET

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**HATTELAND®**  
**DISPLAY**

Manufacturer: **Hatteland Display AS**  
Product: **Compact Fanless Computer**  
Type: **HT B18 STy-Axxx** (y=OS, xxx=Config)

(HWcode00 / HWcode90)

Last Revised: **08 Feb 2017**  
Revision#: **30**

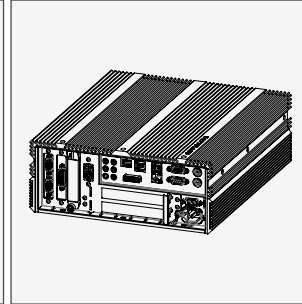
## Compact Fanless Computer

### Features:

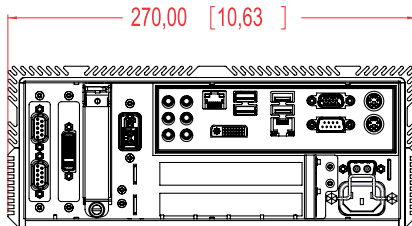
All HT B18 models features Heat Pipe Cooling Technology, Interchangeable CPU, PCI support and HDD-Free Solution with Solid State Disk (SSD) which increases application performance and ensures fast data transfers to minimize boot time.

In addition it features aluminium chassis w/no apertures and comes standard with Multi-power (AC and DC power input built in) ensuring that they are compatible with all power systems on all vessels. It will automatically switch to whatever power is connected, making it highly flexible for shipbuilders and system integrators alike.

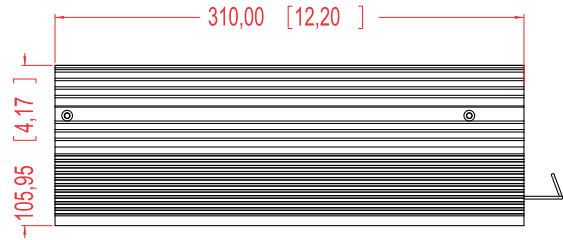
The HT B18 is fanless with no moving parts inside which will prolong lifetime and reduce service costs.



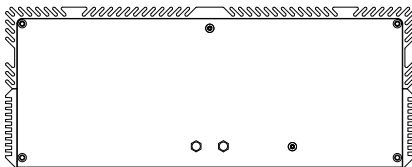
FRONT VIEW



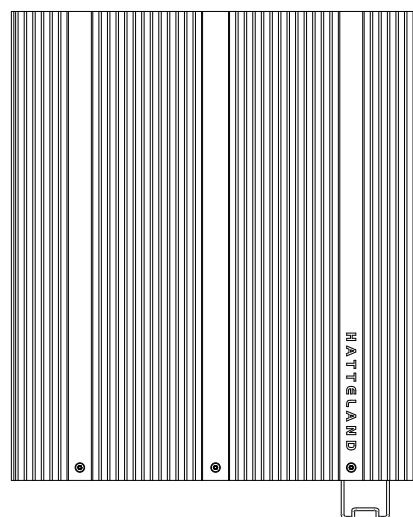
SIDE VIEW



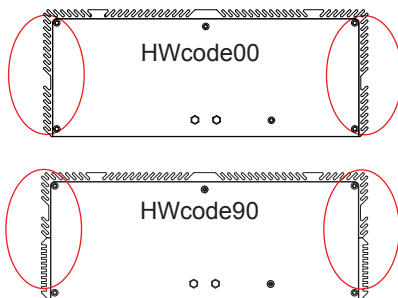
BACK VIEW



TOP VIEW



Chassis Difference



\* HWcode00 manufactured from March 2010.  
\* HWcode90 manufactured from June 2010. Shown on datasheet

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: (Standard model)

• Processor	: 1 x Intel® Core™2 Duo Desktop Processor P8400 - 2.26GHz, Bus Speed 1066MHz, 3MB L2 Cache
• Memory	: 2 x 1GB installed (Dual Channel 200-pin DDR2 800/667MHz SO-DIMM)
• Graphics	: Intel® Graphics Media Accelerator GMA 4500MHD Integrated/Daughter Board (CH7307C)
• Graphics Res.	: Max 1920 x 1200 @ 60Hz (Note: For 1600x1200/1920x1200, DVI must be set to CVT-RB (Coordinated Video Timing-Reduced Blanking) mode manually).
• System Chipset	: Intel® GM45 / ICH9 support Intel® Active Management Technology
• IO Chipset	: Winbond W83627DHG
• BIOS	: AWARD BIOS
• PCI Slots	: 2 x PCI Rev2.3 Slot 32-bit, 3V and 5V Interface, Full Height & Half Length (Default Configuration) Note: Please also review max power consumption in "Power Specifications" table below.
• Ethernet #1	: 1 x 10/100/1000Mbps, ICH9M Intel® 82567L
• Ethernet #2	: 1 x 10/100/1000Mbps, Intel® 82574L PCI-E Gigabit LAN Controller
• Serial Ports	: 1 x RS-232 + 1 x RS-232/RS-422/RS-485
• USB Ports	: 4 x USB ports - Supports 2.0 & 1.1
• Keyboard Port	: Standard PS/2 mini DIN connector
• Mouse Port	: Standard PS/2 mini DIN connector
• Audio	: ICH9M + AC97 Codec ALC888, 7.1, RCA Jack (Front Out, Line In, Mic, Center/LFE, Surround, Surround back)
• Speaker	: None
• Power Manager	: ACPI
• Watchdog Timer	: Reset: 1 sec.~255 min. and 1 sec. or 1 min./step
• H/W Status Mont.	: Temperatures, voltages & cooling fan status. Auto throttling control if CPU overheats

### External Connector Type:

2 x DVI-D or 1 x DB15F + 1 x DVI-D
1 x RJ-45
1 x RJ-45
2 x DB9M
4 x USB Type A
1 x PS/2
1 x PS/2
6 x JACKS

### Power Specifications:

#### Multi-power Supply:

• 115&230VAC - 50/60Hz + 24VDC	: Model HT B18 STx-Axxx (60W) (STD IEC + 1 x 2p D-SUB (male) - Amphenol FCC17) <b>Note:</b> You may connect either AC power or DC power or both. In case both sources are connected, power will be sourced from the AC input. If AC input is lost, there will be a uninterrupted switch-over to DC input.
• Power Consumption - Operating	: 30W
• Power Consumption PCI	: Max Total Power Consumption (the sum of both slots) shall not exceed 15W.

### Available Models:

#### HT B18 ST0-A100 with:

1 x Intel® Core™2 Duo Desktop Processor P8400 - 2.26GHz  
2 x 1GB installed (Dual Channel DDR2 800/667MHz SO-DIMM 200-pin)  
1 x Replaceable SSD 40GB or more\* 2.5" SATA

#### HT B18 STD-A101 with:

1 x Intel® Core™2 Duo Desktop Processor P8400 - 2.26GHz  
2 x 1GB installed (Dual Channel DDR2 800/667MHz SO-DIMM 200-pin)  
1 x Replaceable SSD 40GB or more\* 2.5" SATA  
1 x Microsoft® Windows® Embedded Enterprise (XP Professional Eng w/SP2c, 32bit)

#### HT B18 STD-A103 with:

1 x Intel® Core™2 Duo Desktop Processor P8400 - 2.26GHz  
2 x 1GB installed (Dual Channel DDR2 800/667MHz SO-DIMM 200-pin)  
1 x Replaceable SSD 40GB or more\* 2.5" SATA  
1 x HT 00253 OPT-A1 Serial I/O Card (4 x COM ports - Supports RS-232/422/485)  
1 x Microsoft® Windows® Embedded Enterprise (XP Professional Eng w/SP2c, 32bit)

\* Size indicated is the lowest size available/approved for current revision of data sheet. The unit will support increased disk space in future. Please contact sales for up-to-date status.

### Capabilities / Prepared for:

- 4GB (Dual Channel 200-pin DDR2 800MHz SO-DIMM)
- HT 00253 OPT-A1 = 4 x COM isolated, incl. cable, RS232/422/485
- HT 00252 OPT-A1 = 8 x COM isolated, incl. cable, RS232/422/485
- 1 x 1TB HDD (SATA 2.5")

### Available Accessories:

- HT 00244 OPT-A1 = 1 x Mounting Plate, RAL 9011
  - HT 00228 OPT-A1 = 1 x Mounting Plate with cable relief, RAL 9011
  - HT 00237 OPT-A1 = 1 x Mounting bracket for PCI cards
  - HT 00246 OPT-A1 = 1 x Mounting Bracket Kit (included with delivery)
  - JH C01MF A-A = 1 x USB Cable 1m, Type A to Chassis mount receptacle
  - HT 00300 MSOS = OS options -> <http://www.hatteland-display.com/os>
- \*Please see user manual/datasheet for more information

### Models without/with OS:

- HT B18 ST0-Axxx = No OS
- HT B18 ST3-Axxx = Microsoft® Windows® Embedded Enterprise (Win Server 2003 Eng, 32bit)
- HT B18 ST7-Axxx = Microsoft® Windows® Embedded Enterprise (Win 7 Pro Eng, 32bit)
- HT B18 ST8-Axxx = Microsoft® Windows® Embedded Enterprise (Win Server 2008 Eng, 32bit)

## MECHANICAL DESCRIPTION

### Physical Specifications:

- 270.00 (W) x 105.95 (H) x 310.00 (D) mm
- 10.63" (W) x 4.17" (H) x 12.20" (D)
- Weight: Approx 5 kg
- Aluminium Cooling Chassis
- Power push button, power led, reset button and SSD Led

### Environmental Considerations:

- Operating : Temperature -15 deg. C to +55 deg. C  
Humidity up to 95%
- Storage : Temperature -20 deg. C to +60 deg. C  
Humidity up to 95%

#### Lifetime Considerations:

Even although 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.

Compass Safe Distance HT B18 STx-Axxx - Standard: 75cm - Steering: 45cm

## APPROVALS & CERTIFICATES

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

<b>IEC 60945 4th (EN 60945:2002)</b>	<b>IACS E10</b>	<b>DNV</b> - Det Norske Veritas	<b>EN61162</b>	<b>ClassNK</b> - Nippon Kaiji Kyokai
<b>ABS</b> - American Bureau of Shipping	<b>GL</b> - Germanischer Lloyd	<b>BV</b> - Bureau Veritas	<b>LRS</b> - Lloyd's Register of Shipping	
<b>EU RO MR</b> - Mutual Recognition				