

Manufacturer: **Hatteland Display AS**

Product: **Compact Fanless Computer**

Type: **HT B18 STD-Axxx (HWcode00 / HWcode90)**

Last Revised: **17 Jun 2010**  
Revision#: **09**

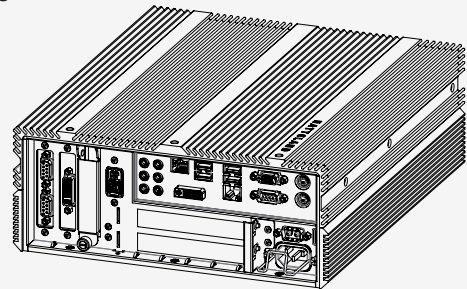
## Compact Fanless Computer

### Overview:

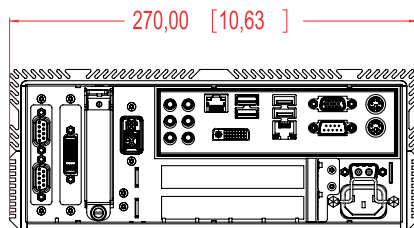
All **HT B18** models features Heat Pipe Cooling Technology, Interchangeable CPU, PCI/PCIe support and HDD-Free Solution with Solid State Disk (SSD) which ensures fast data transfers to minimize boot time.

In addition it features aluminium chassis w/no apertures and comes standard with MultiPower (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.

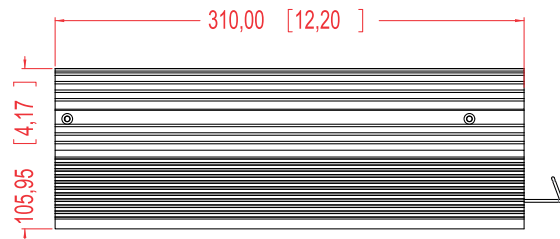
The HT B18 is fanless with no moving parts inside which will prolong lifetime and reduce service costs.



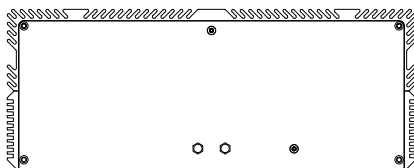
FRONT VIEW



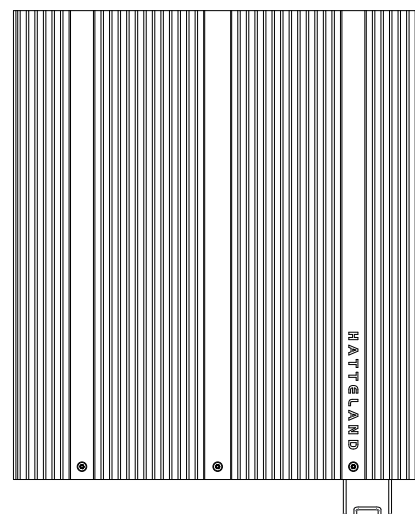
SIDE VIEW



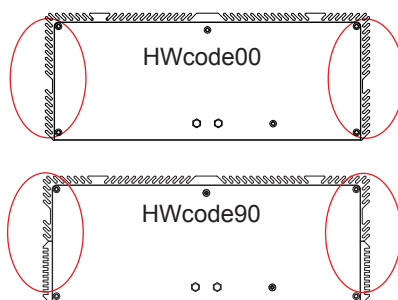
BACK VIEW



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.

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Note: All specifications are subject to change without prior notice!

## TECHNICAL DESCRIPTION

### Computer Specifications: (Standard model)

### External Connector Type:

<ul style="list-style-type: none"> <li>Processor : 1 x Intel® Core™2 Duo Desktop Processor P8400 - 2.26GHz, Bus Speed 1066MHz, 3MB L2 Cache</li> <li>Memory : 2 x 1GB installed (Dual Channel 200-pin DDR2 800MHz SO-DIMM)</li> <li>Graphics : Intel® Graphics Media Accelerator GMA 4500MHD Integrated/Daughter Board (CH7307C)</li> <li>Graphics Res. : Max 1600 x 1200 @ 60Hz</li> <li>System Chipset : Intel® GM45 / ICH9 support Intel® Active Management Technology</li> <li>IO Chipset : Winbond W83627DHG</li> <li>BIOS : AWARD BIOS</li> <li>PCI Slots : 2 x PCI Rev2.3 Slot 32-bit, 3V and 5V Interface, Full Height &amp; Half Length (Default Configuration) Note: Please also review max power consumption in "Power Specifications" table below.</li> </ul>	<ul style="list-style-type: none"> <li>2 x DVI-D or 1 x DB15F + 1 x DVI-D</li> </ul>
<ul style="list-style-type: none"> <li>Ethernet #1 : 1 x 10/100/1000Mbps, ICH9M Intel® 82567L</li> <li>Ethernet #2 : 1 x 10/100/1000Mbps, Intel® 82574L PCI-E Gigabit LAN Controller</li> <li>Serial Ports : 1 x RS-232 (COM1) + 1 x RS-232/RS-422/RS-485 (COM2)</li> <li>USB Ports : 4 x USB ports - Supports 2.0 &amp; 1.1</li> <li>Keyboard Port : Standard PS/2 mini DIN connector</li> <li>Mouse Port : Standard PS/2 mini DIN connector</li> <li>Audio : ICH9M + AC97 Codec ALC888, 7.1, RCA Jack (Front Out,Line In,Mic,Center/LFE,Surround,Surround back</li> </ul>	<ul style="list-style-type: none"> <li>1 x RJ-45</li> <li>1 x RJ-45</li> <li>2 x DB9M</li> <li>4 x USB Type A</li> <li>1 x PS/2</li> <li>1 x PS/2</li> <li>6 x JACKS</li> </ul>
<ul style="list-style-type: none"> <li>Speaker : No</li> <li>Power Manager : ACPI</li> <li>Watchdog Timer : Reset: 1 sec.~255 min. and 1 sec. or 1 min./step</li> <li>H/W Status Mont. : Temperatures, voltages &amp; cooling fan status. Auto throttling control if CPU overheats</li> </ul>	

### Power Specifications:

#### Power Supply Options:

- 115&230VAC - 50/60Hz + 24VDC : Model HT B18 STD-Axxx (60W) (STD IEC + 1 x 2p D-SUB (male) - Amphenol FCC17)  
**Note:** 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/PCIe : Max Total Power Consumption (the sum of both slots) shall not exceed 15W.

### Available Models:

#### HT B18 STD-A100 with (Standard Chassis 2.26GHz 2GB RAM 30GB SDD):

- 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 30GB or more\* 2.5" SATA

#### HT B18 STD-A101 with (Standard Chassis 2.26GHz 2GB RAM 30GB SDD):

- 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 30GB or more\* 2.5" SATA
- 1 x Microsoft® Windows® Embedded Enterprise (XP Professional Eng w/SP2c, 32bit)

#### HT B18 STD-A103 with (Standard Chassis 2.26GHz 2GB RAM 30GB SDD):

- 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 30GB or more\* 2.5" SATA
- 1 x MOXA 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.

### Available Accessories:

- HT 00244 OPT-A1 = Mounting Bracket, RAL 9011
- HT 00228 OPT-A1 = Mounting Bracket with cable relief, RAL 9011
- HT 00215 OPT-A1 = Extra recovery image (USB memory stick)
- HT 00237 OPT-A1 = Mounting bracket for PCI/PCIe cards
- MOXA Serial I/O Card (8 x COM ports - Supports RS-232/422/485)
- Please see user manual for drawings (where applicable).

### Capabilities / Prepared for:

- 1 x PCI + 1 x PCIe1 (Both Full Height & Half Length)
- 4GB (Dual Channel 200-pin DDR2 800MHz SO-DIMM)

## MECHANICAL DESCRIPTION

### Physical Specifications:

#### Without mounting bracket:

- 270.00 (W) x 105.95 (H) x 310.00 (D) mm
- 10.63" (W) x 4.17" (H) x 12.20" (D)

#### With mounting bracket:

- 353.00 (W) x 109.95 (H) x 405.00 (D) mm
- 13.90" (W) x 4.33" (H) x 15.94" (D)

- Weight: Approx 5 kg
- Aluminium Cooling Chassis
- Power button, power led, reset button and HDD 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%

#### Safety 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 STD-Axxx - Standard: 75cm - Steering: 45cm - MTBF (Mean Time Between Failures) = 44622 hours

## 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>EN61162</b> (pending)             | <b>ClassNK</b> - Nippon Kaiji Kyokai (pending)     |
| <b>DNV</b> - Det Norske Veritas (pending)           | <b>GL</b> - Germanischer Lloyd (pending) | <b>BV</b> - Bureau Veritas (pending) | <b>ABS</b> - American Bureau of Shipping (pending) |
| <b>LRS</b> - Lloyd's Register of Shipping (pending) |  |                                      |  |