

Manufacturer: **Hatteland Display AS**

Product: **Compact Computer**

Type: **HT B04xM STD-yz**  
(x=processor board, y=processor speed, z=AC or DC)

Last Revised: **14 Jan 2010**  
Revision#: **27**

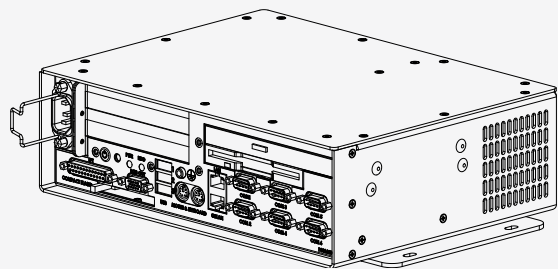
## Compact Computer

### Overview:

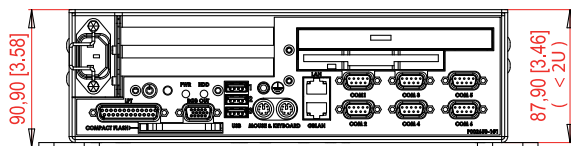
The **HT B04xM STD** is a powerful ultra compact computer with most computer functions built into a form factor that can be placed virtually anywhere. This unit can be equipped with different processor types and speeds from; Intel® Pentium®M (**HT B04PM STD**) or Intel® Celeron®M (**HT B04CM STD**). An ideal and robust unit for mobile, marine and automation systems. Useable for TFT, CRT and Plasma.

### Global Computer Specification: (Applies for all models)

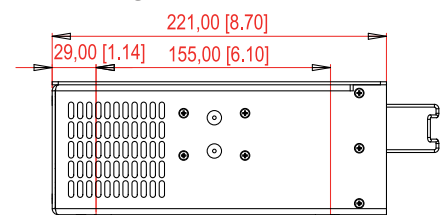
- 1 x Automotive 40GB 2,5" HDD (Replaceable)
- 1 x Compact Flash Reader
- 1 x Slim 24x CD-ROM
- 1 x 1.44MB Floppy Drive
- 1 x 10/100Mbps and 1 x 10/100/1000Mbps Gigabit Lan
- 6 x RS-232/422/485 Serial Ports (fully isolated RS422/485)
- 1 x Parallel port
- 3 x USB ports
- Amount of RAM from 256MB to 1GB
- Standard PS/2 for keyboard and mouse.
- 115/230V or 24VDC - 100W Power supply (Autorange)
- See page 2 for complete specifications and options



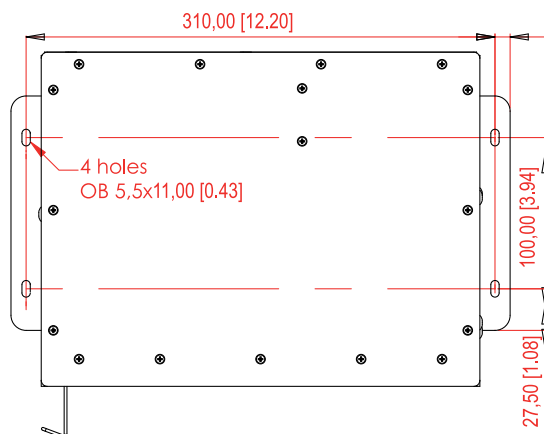
FRONT VIEW



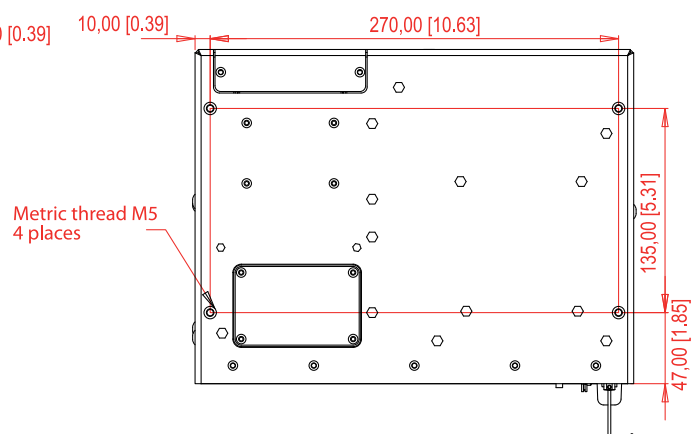
SIDE VIEW



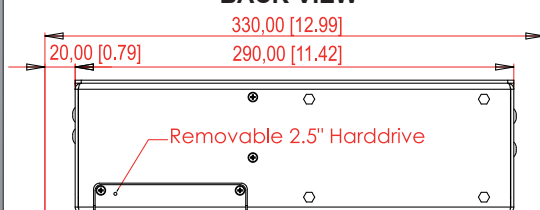
TOP VIEW



BOTTOM VIEW



BACK 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.

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

## TECHNICAL DESCRIPTION

### Global/Standard Computer Specifications:

### Connector Type:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Installed OS : None, please specify when ordering</li> <li>• Storage : 1 x Automotive Removable 40GB 2.5" IDE, 4200 RPM, 2MB Buffer</li> <li>• CD-ROM / RW : 1 x 24x Slim CD-R</li> <li>• Floppy FDD : 1 x 1.44 MB 3.5" SLIM</li> <li>• RGB/VGA OUT : 1 x DSUB 15P</li> <li>• Compact Flash : 1 x CompactFlash Reader Type I/II with eject button</li> <li>• Parallel Port (LPT) : 1 x Bi-Directional Centronics with SPP/EPP/ECP mode</li> <li>• Serial Ports : 6 x RS-232/422/485 (fully isolated in RS422/485 mode)</li> <li>• 1st Ethernet : 1 x 10/100 Mbps</li> <li>• 2nd Ethernet : 1 x 10/100/1000 Mbps Intel® 82541GI Giga Lan</li> <li>• Keyboard Port : 1 x Standard PS/2 mini DIN connector</li> <li>• Mouse Port : 1 x Standard PS/2 mini DIN connector</li> <li>• Power Manager : APM Ver 1.2 and ACPI 1.0a</li> <li>• Monitoring : Power supply, fan and temperature supervision (Also see Processor Board Options)</li> </ul> | <ul style="list-style-type: none"> <li>1 x HD-15F</li> <li>1 x DB25F</li> <li>6 x DB9M</li> <li>1 x RJ-45</li> <li>1 x RJ-45</li> <li>1 x PS/2</li> <li>1 x PS/2</li> </ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Power Specifications:

### Connector Type:

|                                                                                                                                                                                                                                                            |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Power Supply Options:</b> <ul style="list-style-type: none"> <li>• 115VAC/60Hz or 230VAC/50Hz : Model HT B04xM STD x1 (100W) Autorange</li> <li>• 24 VDC : Model HT B04xM STD x2 (100W)</li> <li>• Power Consumption - Operating : TBD (MAX)</li> </ul> | <ul style="list-style-type: none"> <li>STD IEC</li> <li>Screw Terminal</li> </ul> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|

### Processor Board Options:

**A1, B1, D1** = Standard Version AC Power - **A2, B2, D2** = Standard Version DC Power

#### HT B04PM STD-Ax:

- Processor : Intel®Pentium®M 1.1GHz Low Voltage, 1MB L2 Cache
- Front Side Bus : 400Mhz
- Chipset : Intel® 82855GME
- VGA : Intel® Extreme Graphics2 with 2D/3D Graphics
- BIOS : Phoenix 2Mbit Flash BIOS
- RAM : 1 x SODIMM slot, 256MB->1GB, DDR200/266/333 MHz
- IDE Interface : Enhanced IDE UDMA 33/66/100
- USB Ports : 3 x USB2.0 - 480Mbps

#### HT B04CM STD-Ax:

- Processor : Intel®Celeron®M 600MHz, ULV, 512KB L2 Cache
- Front Side Bus : 400MHz
- Chipset : Intel® 852GM
- VGA : Intel® Extreme Graphics2 with 2D/3D Graphics
- BIOS : Phoenix 2Mbit Flash BIOS
- RAM : 1 x SODIMM slot, 256MB->1GB, DDR200/266/333 MHz
- IDE Interface : Enhanced IDE supports UDMA 33/66/100
- USB Ports : 3 x USB2.0 - 480Mbps

#### HT B04PM STD-Bx / Dx

- Processor (-Bx) : Intel®Pentium®M 725 "Dothan" - 1.6GHz, 2MB L2 Cache
- Front Side Bus : 400Mhz
- Chipset : Intel® 82855GME
- VGA : Intel® Extreme Graphics2 with 2D/3D Graphics
- BIOS : Phoenix 2Mbit Flash BIOS
- RAM : 1 x SODIMM slot, 256MB->1GB, DDR200/266/333 MHz
- IDE Interface : Enhanced IDE UDMA 33/66/100
- USB Ports : 3 x USB2.0 - 480Mbps

### Available Component Options:

- Graphics Card : Dualhead, PCI, 32MB with 1 x DVI-I + 1 x HD-15F D-SUB (By installing this card, 1 USB port needs to be disabled/closed)
- IDE HDD : Upgradable to max 80GB, 2.5", 5400RPM, 2MB Buffer (This HDD is not type approved)
- CD-ROM : Upgradable to DVD-RW 8xDVD+R 8xDVD-R, 4xDVD+/-RW, DVD-RAM, 24xCD-R, Black, Rohs Compliant
- I/O Slots : 2 x PCI Slots or 1 x PC104 & 1 x PCI Slots or 2 x PC104 Slots - (PCI slots fully support half length cards)
- Audio : AC-97 2.2 compliant, 6 channel, 5.1 speaker with LINE IN, LINE OUT, MIC IN 3.5mm jacks

Note: These options are factory installed.

## MECHANICAL DESCRIPTION

### Physical Specifications:

- 290 (W) x 87.90 (H) x 221 (D) mm - 11.42" (W) x 3.46" (H) x 8.70" (D)
- Weight: 3 kg (approx)
- Aluminium Chassis & Mounting Brackets
- Removeable hatch for accessing replaceable HD (back)
- Removeable hatch for accessing serial config (bottom)

Compass Safe Distance:

HT B04PM STD Standard: 75cm Steering: 55cm  
HT B04CM STD Standard: 75cm\* Steering: 55cm\*

\*Not tested, but expected to be the same as corresponding model.

### 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.

## APPROVALS & CERTIFICATES

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

**HT B04PM STD-Ax:**  
**EN60945 4th (IEC945 4th)**  
GL - Germanischer Lloyd

**IACS E10,**  
**BV** - Bureau Veritas)

**DNV** - Det Norske Veritas  
**ABS** - American Bureau of Shipping

**LRS** - Lloyd's Register of Shipping  
**ClassNK** - Nippon Kaiji Kyokai

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