

Manufacturer: **Hatteland Display AS**

Product: **15.0 inch Maritime Multi Computer (MMC)**

Type: **JH 15T05 MMC**

Last Revised: **26 Mar 2009**
Revision#: **32**

15.0 inch Maritime Multi Computer (MMC)

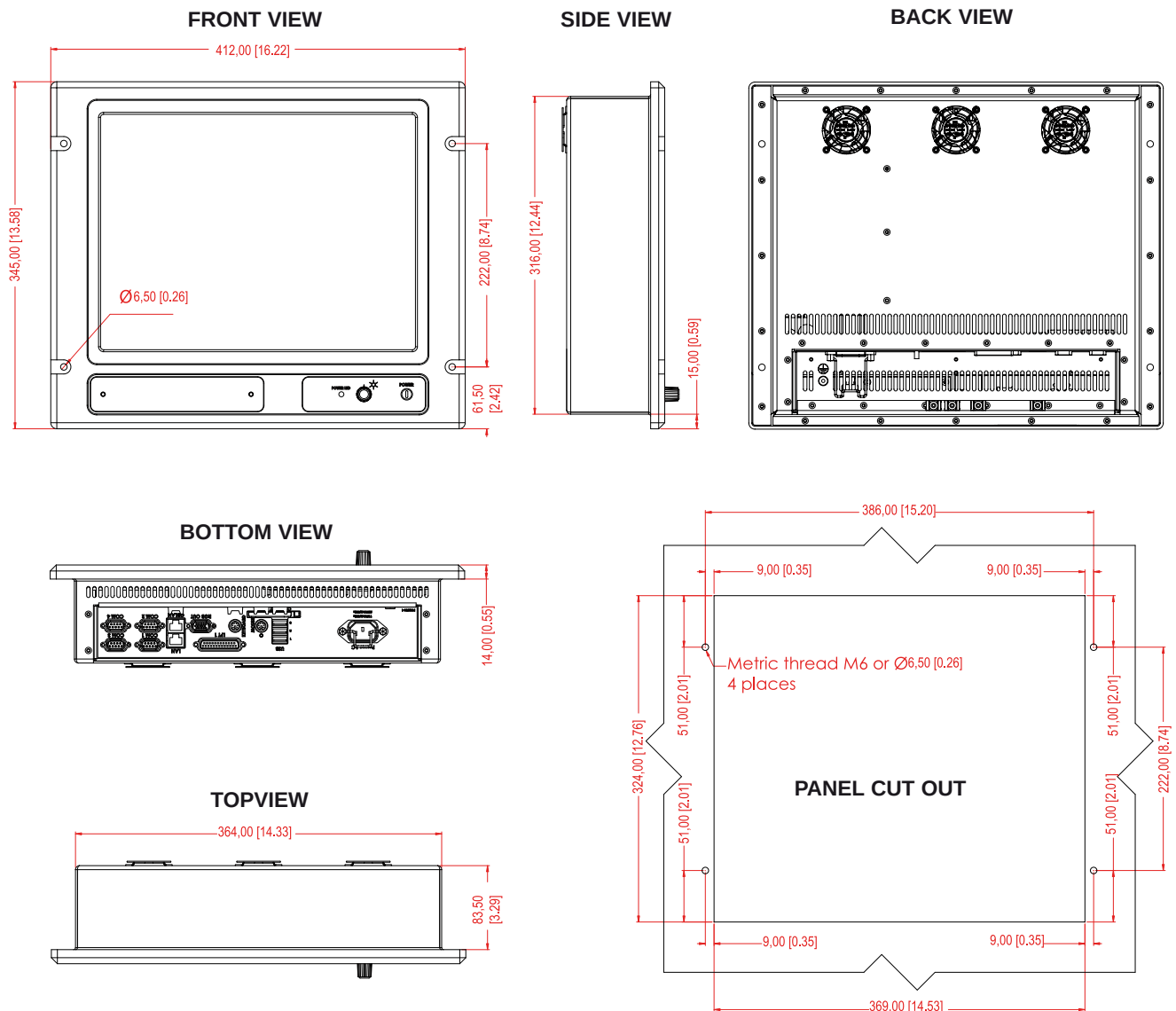
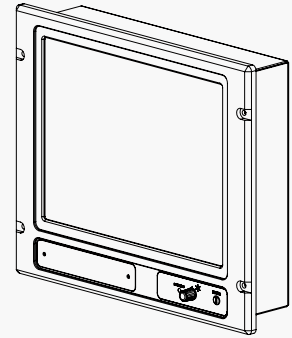
Features:

The combination of the reliable design of the marine TFT-LCD modules, together with industrial computer boards make this product suitable for customer applications where space is critical, and full function is desired in a single unit.

In particular, the mainboard allows full flexibility when it comes to processor choice. With multiple useful standard components this is an highly attractive commercial package.

This unit is equipped with a 1.1GHz Intel® Pentium®M processor as standard and accepts up to 1 GB RAM and features RGB OUT.

Brightness is adjustable from 0 to 100%.



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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TECHNICAL DESCRIPTION

TFT Technology:

- 15.0 inch viewable image size
- Color Active Matrix LCD Module
- a-Si Thin Film Transistor (TFT)

TFT Characteristics:

- Pixel number : 1024 x 768
- Pixel pitch (RGB) : 0.297 (H) x 0.297 (V) mm
- Response Time : 25 ms (typical), black to white to black
- Contrast Ratio : 400:1 (typ)
- Light Intensity : 250 cd/m2 (typical)
- Viewable Angle : +/- 85 deg. (min) (Up/Down/Left/Right) (@ CR > 10)
- Active Display Area : 304.1 (H) x 228.1 (V) mm
- Max Colors : 16.7 millions

Computer Specifications:

- Installed OS : None, please specify when ordering
- Processor : Intel® Pentium®M 1.1GHz, Low Voltage
- Cache / PCI Clock : 1MB Level 2 Cache / 400 MHz BUS
- System Chipset : Intel® 82855GME
- BIOS : Phoenix 2Mbit Flash, Supports ACPI
- PC/104 Slot : 1 x PC/104 with ISA Support
- Memory Slot : 1 x SODIMM with ECC, from 256MB->1GB
- Graphics Chip : Intel® 82855GME (Integrated/250MHz)
- IDE Controller : 1 x IDE Ports, Ultra DMA33/66/100
- Storage : 1 x Automotive 40GB, 2.5" IDE, 4200 RPM
- Compact Flash : 1 x CF Socket with Eject (Type I & II)
- Parallel Port (LPT) : 1 x EPP/ECP Port
- Primary Ethernet : 1 x 10/100 Mbps
- Secondary Ethernet : 1 x 10/100/1000 Mbps
- Serial Ports : 4 x RS232/RS422/RS485 (fully isolated)*
- USB Ports : 4 x USB (2.0 compliant, 480Mbps)
- Keyboard/Mouse : 2 x PS/2
- Supported TFT Res. : From 640 x 480 up to 2048 x 1536**
- RGB OUT Res : From 640 x 480 up to 1600 x 1200

* only in RS422/485 mode

** Optimal 1:1 resolution and recommended is 1024 x 768 @ 60 Hz.

** If resolutions is set above 1:1, desktop scrolling mode will be used.

Power Specifications:

Power Supply Options:

- 115 & 230VAC - 50 / 60Hz : Model JH 15T05 MMC-A1
- 24 VDC : Model JH 15T05 MMC-A2

Power Consumption:

- Operating : 100W (max) (Configuration depending)
- 65W (typ AC) (Max backlight & high CPU load)
- 44,2W (typ DC) (Max backlight & high CPU load)

Factory Options:

- Audio AC97 Compliant : Line In/Out, Mic In, Speaker Out
- TV-Out : 1 x Composite (Depends on model)
- Processor : Up to 1.8 GHz
- Memory : Up to 1GB
- Touch Screen
- Internal Serial Remote Control (SCOM) - JH 15T05 MMC-Ex models

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

MECHANICAL DESCRIPTION

Physical Dimensions:

- 412 (W) x 345 (H) x 97.5 (D) mm - 16.22" (W) x 13.58" (H) x 3.84" (D)
- Weight: 8 kg (approx)

User Controls:

On front bezel:

- Power On/Off (push button)
- Brightness Control
- Power LED

Behind IP66 rated hatch:

- USB 2.0 connector(s)

Environmental Considerations:

- Operating : Temperature -15 deg. C to +55 deg. C
Humidity up to 95%
- Storage : Temperature -20 deg. C to +70 deg. C
Humidity up to 95%
- IP-Rating : IP66

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.

Input/Output Connectors:

Function	Back side	Inside	Front
Ethernet Lan/GBLan	2 x RJ-45		
PC/104 Slot		1 x PC/104 Slot	
Keyboard	1 x PS/2		
Mouse	1 x PS/2		
Compact Flash	1 x CF Socket		
COM 1	1 x DB9M		
COM 2	1 x DB9M		
COM 3	1 x DB9M		
COM 4	1 x DB9M		
LPT1	1 x DB25F		
USB2.0	3 x USB		1 x USB
AC Power	Std IEC inlet (Odd version models)		
DC Power	DC Screw terminal (Even version models)		
RGB Out	1 x HD-15F		
TV Out	Composite RCA (depends on model)		
Line In/Out	3.5mm mini jack (depends on model)		
Mic In	3.5mm mini jack (depends on model)		

Accessories:

- JH 15TSV : Sun visor *
- JH 15TBRMMC : Bracket *
- JH 15TAP STD : 15" Adapter Plate/Frame to 19" Rack
- P005335-1 : Front Label with HDD LED and Reset Button Aperture



Standard/Retrofit

P005335-1

* Option: Standard or custom logo and color

Compass Safe Distance: JH 15T05 MMC

Standard: 125cm

Steering: 80cm

APPROVALS & CERTIFICATES

This product have been tested / type approved by the following classification societies:

EN60945 4th (IEC945 4th)
IACS E10
ABS - American Bureau of Shipping)

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

DNV - Det Norske Veritas
BV - Bureau Veritas
RS - Russian Maritime Register of Shipping