

Manufacturer: **Hatteland Technology AS**

Product: **13.3 inch Standard Display (STD)**

Type: **HD 13T21 STD-xxx-Fxxx**

Last Revised: **05 Dec 2022**
Revision#: **26**

13.3 inch Standard Display (STD) - Series X

Features:

Series X Displays offer the ultimate in performance, convenience, state of the art design and enduring quality for system integrators and boat builders. Series X products offer a range of feature sets optimized for varying requirements and applications.

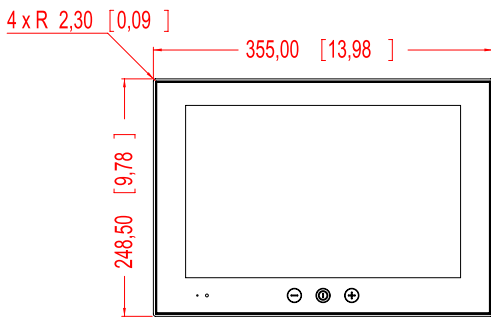
The Series X display range is a flexible monitor solution designed and type approved for the professional maritime segment, where reliability and long life time are key prerequisites for the industry. The product range combines stunning design and technology with innovative features and options, making it all that the integrator needs for top class type-approved marine systems.

The entry level STD models provide a wide choice of display size and format for shipboard applications where simple data input (DVI & VGA) is required. Be it for ship navigation or automation, this range with all it's possible options provides a robust and cost effective platform from which to display and manage data.

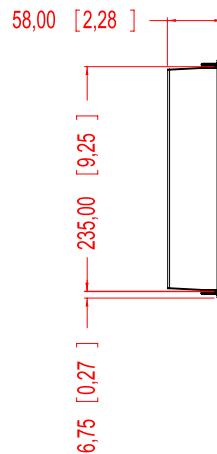
This model is delivered with a factory mounted Projected Capacitive Touch Screen (Multitouch, USB interface) as standard and features LED Backlight Technology.



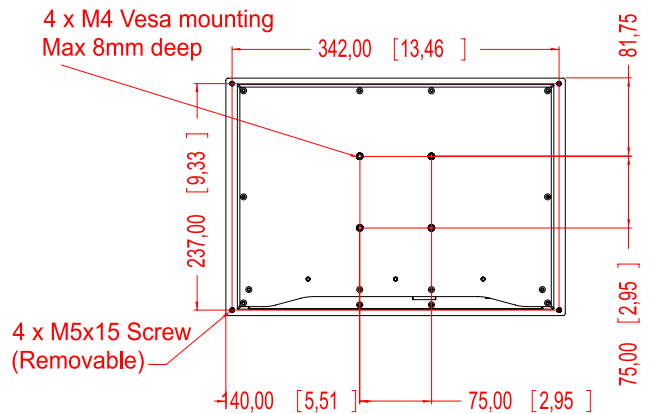
FRONT VIEW



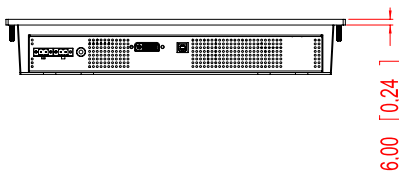
SIDE VIEW



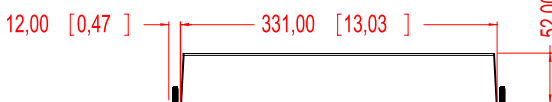
BACK VIEW



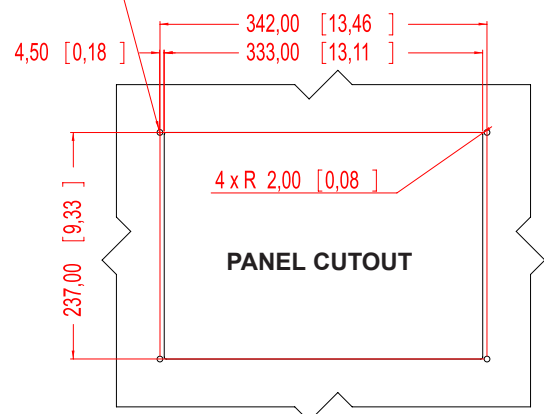
BOTTOM VIEW



TOP VIEW



4 x Ø 6,00 [0,24] THRU



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.

TFT Technology:

- 13.3 inch TFT Liquid Crystal Display module
- Widescreen, Aspect Ratio 16:10
- a-si TFT Active Matrix
- LED Backlight Technology

TFT Characteristics:

- Native Resolution : 1280 x 800 (WXGA)
- Pixel Pitch (RGB) : 0.2235 (H) x 0.2235 (V) mm
- Response Time : 6/10ms (typical) (Tr/Tf)
- Contrast Ratio : 800:1 (typical)
- Light Intensity : 500 cd/m2 (typical)
- Viewable Angle : 70 deg (H) 60 deg (V) (typical)
- Active Display Area : 286.08 (H) x 178.8 (V) mm
- Max Colors : 16.7 million

Supported Signals:

Resolutions:

- WVGA : 640 x 480 (including 720 x 400)
- WSVGA : 800 x 600
- WXGA : 1024 x 768, 1280 x 800*

* Recommended for optimal picture quality

Power Specifications:

Power Supply:

- 2 x 24VDC : Model HD 13T21 STD-Exx-Fxxx
- Dual input, galvanic isolated, automatic switch between power source

Power Consumption:

- Operating : 20W (typ) - 75W (max)

Physical Considerations:

Product Dimensions and Weight:

- 355.00 (W) x 248.50 (H) x 58.00 (D) mm
- 13.98" (W) x 9.78" (H) x 2.28" (D)
- Compatible VESA mounting 75mm, 4xM4 VESA mounting, Max 8mm deep
- Built-in Console mounting 4 x M5x15mm screws
- Approx weight: 3.0kg / 6.6lbs

Product Carton Size and Weight (Shipping):

- L:470.00 [18.50"] x W:220.00 [8.66"] x H:450.00 [17.72"] mm [inch]
- Approx weight: 4.3kg / 9.5lbs

Signal Terminals:

- DVI-I Signal IN : 1 x 29p DVI Female (or as RGB IN with adapter)
- Touchscreen : 1 x USB TYPE B Connector (female)
- DC Power IN : 2 x 2-pin Terminal Block 5.08

User Controls:

Behind front bezel - Glass Display Control™ (GDC) IP66:

- Power On/Off, Brightness Control (-/+), Light Sensor (not visible)
- Programmable Alarm LED, Buzzer (not visible) (75-85dB)

Environmental Considerations:

• Operating	: Temperature -15°C to +55°C
• Storage	: Temperature -20°C to +60°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
• IP Rating	: Protection: IP66 front - IP22 rear (EN60529)
• Compass Safe Distance	: Standard: 45cm - Steering: 30cm

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.

Factory Mounted Options:

- Optical Bonding Technology

Factory Defaults:

- Projected Capacitive Touch Screen (Multitouch, USB interface)

Available Standard Models:

- HD 13T21 STD-EA1-FAGP = Dual DC, GDC, Buzzer, PCTouch
- HD 13T21 STD-EA1-FOGP = Dual DC, Optical Bonding Technology, GDC, Buzzer, PCTouch

TESTING / APPROVALS & CERTIFICATES

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

IEC 60945 4th (EN 60945:2002) **IACS E10**

DNV - Det Norske Veritas

EU RO MR - Mutual Recognition by DNV

ABS - American Bureau of Shipping

CCS - China Classification Society

ClassNK - Nippon Kaiji Kyokai

BV - Bureau Veritas

KR - Korean Register of Shipping

GL - Germanischer Lloyd

LRS - Loyd's Register of Shipping