

Manufacturer: **Hatteland Technology AS**

Product: **55.0 inch Multi Vision Display (MVD)**

Type: **HD 55T22 MVD-MAX-AOGx (Wall Mount Model)**

Last Revised: **16 Dec 2022**

Revision#: **23**

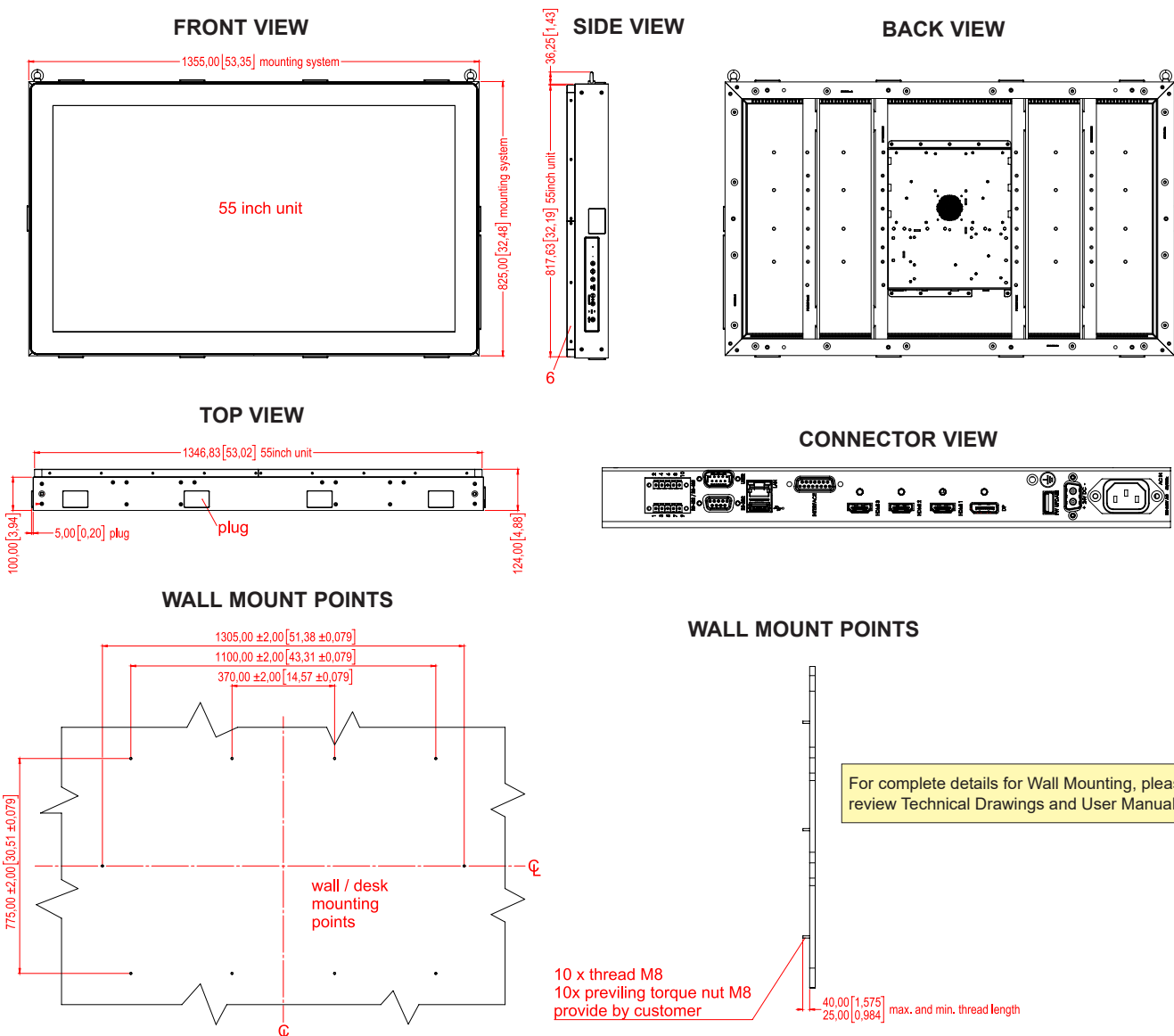
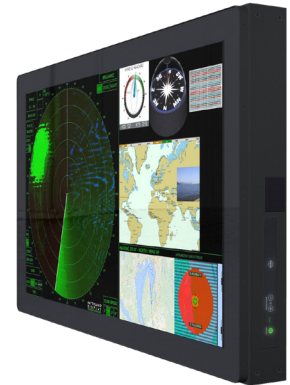
## 55.0 inch Multi Vision Display - Series X

### Features:

The Series X Multi Vision Display (MVD) range of products provides large 4K resolution display solutions to maritime IBS, Automation and Command Control system integrators. The cutting edge high definition LED display technology used, with its high quality brightness and contrast, enables the presentation of large amounts of data onto one screen instead of multiple displays.

Using the pinnacle of new maritime display technology from Hatteland Technology, previously only available for console-mounting or configured as an innovative chart & planning table, the new Series X 55 inch Ultra High Definition wall mounted MVD is designed to enable quick and easy integration in any IBS design.

The system will become a key component of future-focused smart ship technology, playing a critical role in improving operational safety and efficiency at sea. In addition to acting as a multi-data display for bridge systems, Hatteland Technology has designed the new Series X 55 inch Ultra High Definition wall mounted MVD as a flexible solution, suitable for a wide range of applications including ECDIS, radar and voyage planning systems. Hardware features include Touch Screen operation, multi-data input, built in On-Screen Display (OSD), optical bonding for strength and safety as standard, and ECDIS calibration as an option.



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:**

- High Quality TFT with LED Backlight Technology
- 55.0 inch viewable image size, Widescreen, Aspect Ratio 16:9
- TFT active-matrix liquid crystal panel, RGB vertical stripe
- MVA (Multi-domain Vertical Alignment) LCD Technology

**TFT Characteristics:**

- Native Resolution : 3840 x 2160 (UHD, 4K)
- Pixel Pitch (RGB) : 0.315 (H) x 0.315 (V) mm
- Response Time : 6.5 ms (typical) (G to G)
- Contrast Ratio : 4000:1 (typical)
- Light Intensity : 450 cd/m<sup>2</sup> (typical)
- Viewable Angle : +/- 89 deg. (typical) (Up/Down/Left/Right)
- Active Display Area : 1209.6 (H) x 680.4 (V) mm
- Max Colors : 16.7 million

**Supported Signals:****Resolutions:**

VGA (640 x 350) to UHD (3840 x 2160\*)

- Review Timing Table in User Manual

\*Recommended for optimal picture quality

**Power Specifications:****Multi-power Supply:**

- 100-240V AC 50/60Hz + 24 VDC

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: 145W (typ) - 312W (max)

**Physical Considerations:****Product Dimensions and Weight:**

- W:1355.00 [53.35"] x H:828.00 [32.48"] x D:124.00 [4.88"] mm [inch]
- Approx weight: 76.6 kg / 168.5lbs
- Includes 10 x Plug Covers
- Thread screws & M8 torque nuts provided by customer

**Product Carton Size and Weight (Shipping):**

- L:1520 [59.84"] x W:990 [38.98"] mm x H:326 [12.83"] mm [inch]
- Approx weight: 110.0kg / 242.0lbs

**Signal Terminals:**

- HDMI 1.4 Input : 2 x 19p HDMI (female) - Max 3840x2160@30Hz
- HDMI 2.0 Input : 1 x 19p HDMI (female) - Max 3840x2160@60Hz
- DP 1.2 Input : 1 x 20p DisplayPort (female) - Max 3840x2160@60Hz  
Note: Max Cable length: <3m
- SCOM RS-422/485 : 1 x 5-pin Terminal Block 3.81 non-isolated + Buzzer
- SCOM+Touch : 1 x USB TYPE A Connector (female)
- SCOM+Ethernet : 1 x RJ45 Connector
- SCOM RS-232 : 1 x 9p D-SUB (female) non-isolated
- User Interface : 1 x 9p D-SUB (male) - Potentiometer Analog Input, User Brightness (BRT), I2C and +5VDC & 12VDC OUT
- FW Update : 1 x USB TYPE A (female) for Firmware Update
- GDCx Interface : 1 x 15p D-SUB (male) for GDC Hardware Comm.
- AC Power IN : 1 x Std IEC Inlet
- DC Power IN : 1 x 2p D-SUB Connector (male) - Amphenol FCC17

**User Controls:****On right side - Glass Display Control™ (GDC) IP66:**

- Power On/Off (display), On Screen Display Menu (OSD)\*
- Brightness Control (-/+)
- Hotkeys (left/right), Mode Status Indicators (ECDIS, Service)
- Buzzer (not visible) (75-85dB), Light Sensor (not visible)

\*OSD Key Codes: 321=Get access to OSD, 362=Advanced Mode

**Environmental Considerations:**

- Operating : Temperature -15°C to +55°C
- Storage : Temperature -30°C to +70°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 : Operating: 3000m - Storage: 3000m (Bonded)
- IP Rating : Protection: IP66 front - IP22 rear (EN60529)
- Compass Safe Distance : Standard: 500cm - Steering: 230cm

**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.

**Available Accessories:**

- HD REM SX1-A1 : 1 x External Remote Control, EN60945 Tested
  - HD FWM MVD-A1 : 1 x Flat Wall Mount Bracket Kit. Not EN60945 Tested
- Please see user manual/datasheet for more information

**Factory Options:**

- Projected Capacitive Touch Screen (Multitouch, USB interface)
- Color Calibrated models (ECDIS)

**Factory Default:**

- Optical Bonding Technology

**Prepared for:**

- Tactor (Rotation Angle Value, X/Y Position, 1 x Button) supported Model
- Active Stylus Pen Supported Model

**APPROVALS & CERTIFICATES**

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

**IEC 60945 4th (EN 60945:2002)****CCS** - China Classification Society**LRS** - Lloyd's Register of Shipping**IACS E10****BV** - Bureau Veritas**EU RO MR** - Mutual Recognition by DNV**KR** - Korean Register of Shipping**ClassNK** - Nippon Kaiji Kyokai**ABS** - American Bureau of Shipping