



# ULTRA HIGH BRIGHT DISPLAY

## 24 INCH – DATA SHEET

### Features

The Radio Zeeland DMP ultra-high brightness marine TFT display range offers users a clear, sharp and bright picture under any condition. With a backlight brightness ranging from 1 cd/m<sup>2</sup> up to 3000 cd/m<sup>2</sup> these displays are designed to provide optimal viewing comfort in any situation, from the darkest of nights to the brightest of days. Their resistance to solar loading allows them to operate in any mounting angle without the risk of black spots due to overheating.

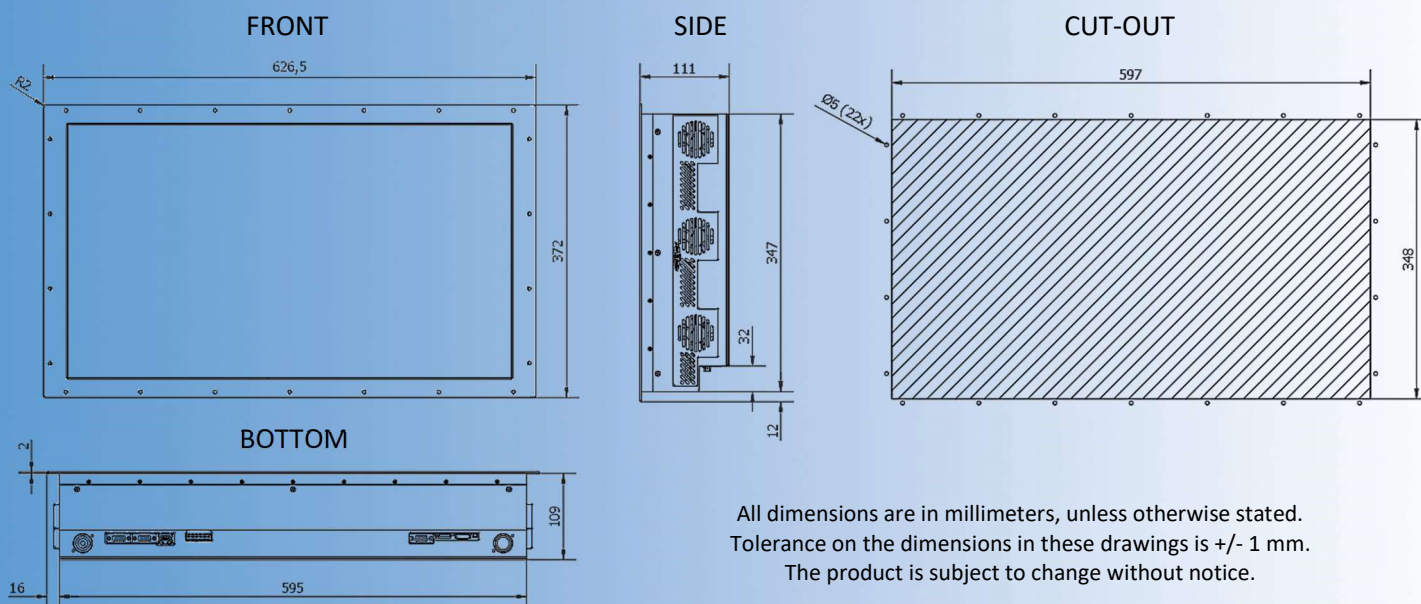
With the displays available in 15-inch XGA, 19-inch SXGA and 24 inch full-HD widescreen there is always a size that will fit your application.

The displays are available as rear-mount units, allowing them to be mounted in your cabinets, panels or other constructions. They can also be supplied as panel mount units with their own front bezel with power, dimming and on-screen display controls making for a quick and easy construction without the need to supply your own controls and front finish.

All displays can be optionally supplied with a projected capacitive touch screen, supporting multi-touch up to 5 fingers, allowing you to create intuitive user-interfaces without the need for an external mouse or keyboard.

An extensive number of third party interfaces with various protocols are available on these displays to allow remote control, monitoring, calibration and service through your preferred system.

### Dimensions & Cut-Out



# TECHNICAL SPECIFICATIONS

## TFT Characteristics

Native Resolution	1920 x 1080
Aspect Ratio	16:9
Pixel Pitch	0.276 x 0.276 mm
Response Time	25 ms (typical)
Contrast Ratio	3000:1 (typical)
Viewing Angle H	170 degrees
Viewing Angle V	160 degrees
Active Display Area	531.36 x 298.89 mm
Refresh Rate	60 Hz – 75 Hz
Colors	16.7 Million

## TFT Technology

- TFT Active-Matrix Liquid Crystal Display
- TN (Twisted Nematic) Display Technology
- Optical Bonding Technology
- Infrared Blocking Technology

## Backlight

Minimum Brightness	1 cd/m <sup>2</sup> (typical) White Luminance
Maximum Brightness	3000 cd/m <sup>2</sup> (typical) White Luminance
Resolution	1000 Steps
Frequency	800 Hz
Uniformity	0.90

## Touch Screen

- Projected Capacitive Touch Screen (PCAP)
- Multitouch up to 5 fingers (Through Driver)
- Gesture Recognition (Through Driver)
- Supported by Windows XP or later, OS-X, Chrome OS and most Linux Distributions
- Single touch operation possible without the need to install any drivers.

## Power Specifications

Power Supply AC	230 VAC - 50/60Hz
Power Consumption	160W (Max)

## Terminals

HDMI	1x HDMI-A Female
Display Port	1x Display Port Female
VGA	1x 15p D-SUB Female
Ethernet	1x RJ45 for 3 <sup>rd</sup> Party Interface
RS-422/485	1x 5p Terminal Block For 3 <sup>rd</sup> Party Interface
RS-232	1x 9p D-SUB Female Service Port
USB	1x USB Type B Female for Touch Screen
CAN-Bus	1x 3p Terminal Block For 3 <sup>rd</sup> Party Interface
OSD	1x 9p D-SUB Male For Hard-wired 3 <sup>rd</sup> Party Controls
AC Power Input	1x Standard IEC Inlet

## Environmental

Operating Temperature	-20 deg. C to 55 deg. C
Storage Temperature	-20 deg. C to 70 deg. C
Humidity	Up to 95%
IP-Rating	IP67 Front – IP22 Rear
Compass Safe Distance	100 cm

**NOTE:** It is expected that the display is mounted in an enclosure or console that is supplied with a forced flow of de-humidified air with a temperature that does not exceed 25 degrees C. This is a necessary prerequisite for optimal performance, long life and limited service.

## Physical

Outer Dimensions	626.5 x 372 x 111 mm
Cut-out Dimensions	567 x 348 mm
Weight	12.3 kg

## Type Approvals

*Pending, to be added*