

# MSI230

Mariner Kit for use with the HP LA2205wg 22-inch TFT monitor (Desk mount)



## WHAT IS SO SPECIAL ABOUT THE HP LA2205WG 22-INCH TFT MONITOR?

- ◆ Experience 3000:1 Dynamic Contrast Ratio, sharp resolutions to 1680 x 1050, and fast 5 ms response time all deliver stunning views of your work while VGA and HDCP-compliant DVI inputs, DisplayPort and integrated USB make advanced connectivity quick and easy
- ◆ Native 1680 x 1050 resolution with over 16 million colours
- ◆ VGA, DVI-D and DisplayPort connectors; HDCP support
- ◆ The on-screen display button controls on the monitor front allows quick and easy adjustment of brightness, contrast and numerous other settings
- ◆ Reduced eyestrain and fatigue with anti-static and anti-glare film coatings
- ◆ HP Display LiteSaver allows you to schedule Sleep mode at preset times to help protect the monitor against image retention, drastically lower power consumption and energy costs, and extend the lifespan of the monitor
- ◆ The HP Compaq LA2205wg is ENERGY STAR® qualified, has an EPEAT™ rating of Gold, is TCO 5.0 Certified, contains packaging that uses materials with a lower environmental impact and includes a low power panel
- ◆ Three-year limited parts and repair labour on-site warranty



The HP LA2205wg 22-inch widescreen TFT monitor is type-approved by all of the major international marine Classification Societies when it is installed in conjunction with our Mariner Kit MSI230.

The MSI230 Mariner Kit is designed to fit onto any horizontal surface and affords protection against the effects of vibration and shock experienced in the offshore marine environment. The combination has been type-tested against IACS Unified Requirement E10 and the relevant sections of IEC60945 (see below right for test details).

This type-approved combination of hardware and Mariner Kit can be used as the platform for your critical navigation, control, loading and general purpose applications (please check individual type-approval certificates for any restrictions).

Please note that although the monitor does retain its standard functionality we do not offer an automatic dimming function and it can not therefore be used in the front of the bridge where it may affect night vision. However, the TFT monitor can be used in any area where night vision is not an issue.

**“Steer the right course  
with Mariner Systems”**



This Mariner system is type-tested against the consolidated, 'worst-case' requirements of all the major international marine Classification Societies:

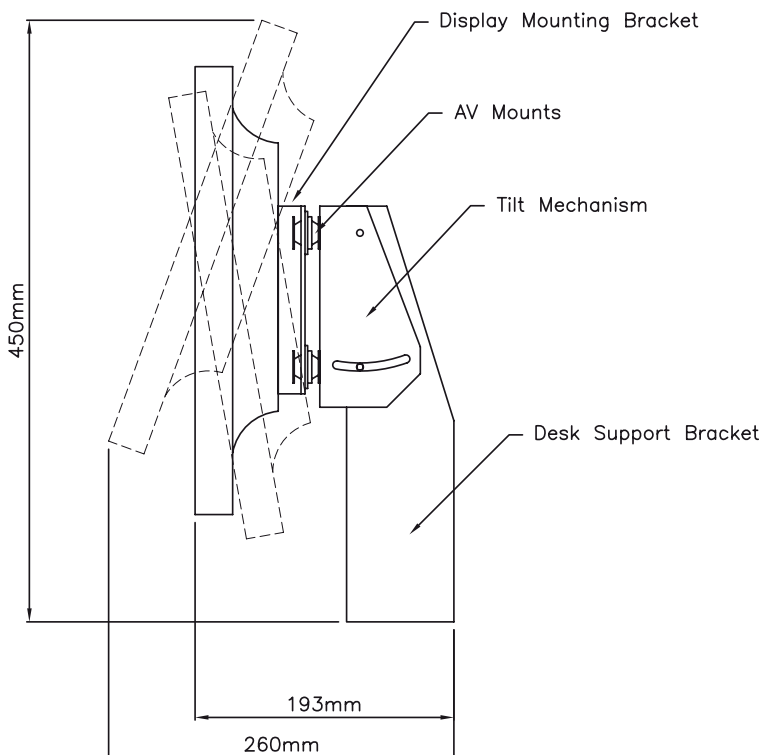
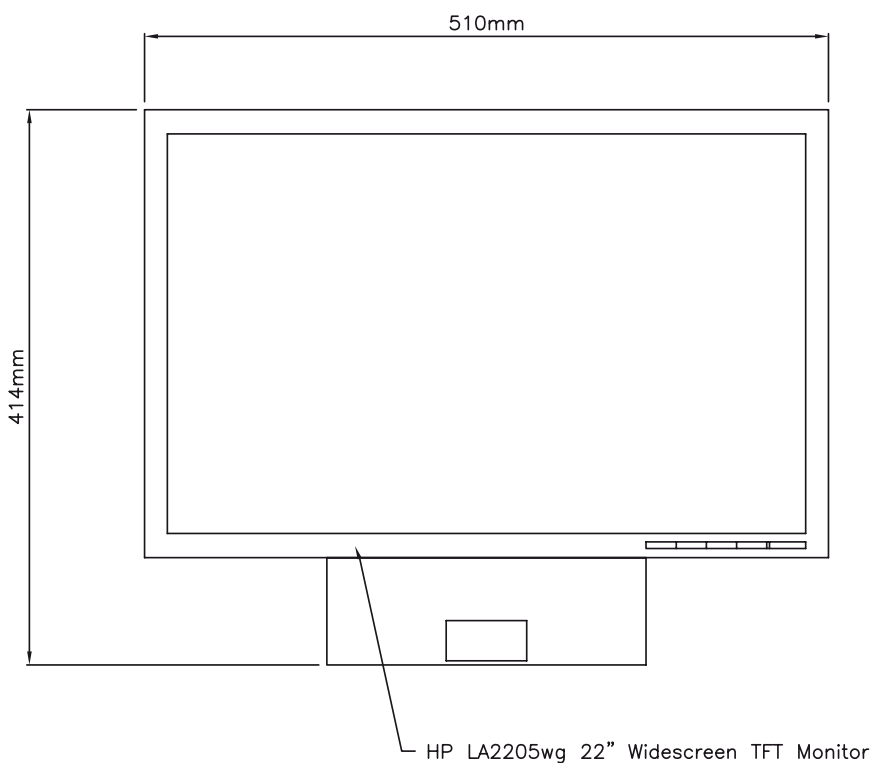
**ABS, BV, CCS, DNV, GL, KR, LR, NKK, PRS, RINA**

Type-tests included on the test programme are as follows:

- > Vibration, Shock, Static and Dynamic Inclination
- > Dry & Damp Heat, Low Temperature
- > Acoustic Noise, Compass Safe Distance
- > High Voltage, Power Supply Variation & Power Supply Failure
- > Conducted LF & RF, Electromagnetic Field
- > Radiated & Conducted Emissions, Electrostatic Discharge
- > Insulation Resistance, Burst / Fast Transients
- > Surge Immunity, Access to Dangerous Voltages

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## OPERATING GUIDELINES

Although all our equipment is tested against extreme environmental conditions for the purposes of marine type-approval, installation should take into account the following guidelines:

- > Keep the monitor away from excessive moisture, direct moisture and the extremes of heat and cold to ensure, where possible, that the unit is within the following operating/non-operating ranges:

	Operating	Non-Operating
<b>Temperature</b>	+5° to +35°C (+41° to +95°F)	-20° to +60°C (-4° to +140°F)
<b>Humidity</b>	20% to 80% (non-condensing)	5% to 95% (38.7°C max wet-bulb)

- > Leave clearance on all vented sides of the monitor to permit the required airflow
- > Never restrict airflow into the monitor by blocking any vents or air intakes
- > If the monitor is to be operated within a separate enclosure, suitable ventilation should be provided

By following these guidelines you will maximise the life of your equipment and minimise service costs.

## STATISTICS

<b>Overall Fitted Dimensions (max)</b>	510mm (w) x 450mm (h) x 260mm (d)
<b>Weight (Mariner Kit only)</b>	2.0 Kg
<b>Weight (including hardware)</b>	6.3 Kg
<b>Type</b>	Wide-Aspect Active matrix TFT (thin film transistor)
<b>Viewable Image Area (diagonal)</b>	22 in (55.9 cm)
<b>Screen Opening (W x H)</b>	18.8 x 11.8 in (47.8 x 30.0 cm)
<b>Recommended Resolution</b>	1680 x 1050 @ 60 Hz
<b>Mariner Kit Tilt Range</b>	10 degrees down; 20 degrees up
<b>Viewing Angle (typical)</b>	Up to 160 degrees horizontal / 160 degrees vertical (10:1 contrast ratio)
<b>Brightness (typical)</b>	250 nits (cd/m <sup>2</sup> )
<b>Contrast Ratio (typical)</b>	1000:1
<b>Dynamic Contrast Ratio (typical)</b>	3000:1
<b>Response Rate (typical)</b>	5 ms (on/off)
<b>Pixel Pitch</b>	0.282 mm
<b>Plug and Play</b>	Yes
<b>Input signal</b>	VGA, DVI-D, and DisplayPort connectors; HDCP support
<b>Video Cable Length</b>	VGA: 5.9 ft (1.8 m) DVI-D: 5.9 ft (1.8 m)
<b>Buttons or switches</b>	Power on/off; 3-button OSD
<b>Input Power</b>	Auto-Sensing, 100 to 240 VAC
<b>Power Cable Length</b>	6.2 ft (1.9 m)