SeaBrite™ Monitors

Marine Grade Flat Panel Monitors In Wide Range of Display Sizes

Features

- Sunlight readable displays, ranging from 8.4" through 23.1"
- Backlight dimming control from nearly 0% to 100%
- Panel-mount IP65 aluminum housing; (NEMA 4 certification on request)
- Wide voltage range for power input
- Touchscreen
- Anti-reflective protective glass
- Front panel OSD controls
- Shock and vibration resistance
- PIP function and multi-video inputs available on most units

The family of SeaBrite™ flat panel monitors utilize a wide range of sunlight readable, wide temperature range TFT LCDs, brightness control technology for excellent viewability in various ambient light conditions, and touchscreen technologies for operator interface to fulfill the demands of the Marine industry. The rugged, anti-corrosion mechanical design provides enhanced shock and vibration resistance for optimum operability in harsh, marine conditions.

SeaBrite™ flat panel monitors accept multi-video inputs, as well as, support other customer-specified functions. These flat panel display monitors can be customized to accommodate most computing interface, marine-environment application.

With a typical weight range of 10- to 18-pounds, the SeaBrite™ flat panel monitors are targeted to the following maritime applications: Radar / ARPA System, Navigation / ECDIS System, Automatic Identification System (AIS), Monitoring / Surveillance System, Yacht / Ship Automation, Maritime & Offshore, and Entertainment.

All SeaBrite™ monitor designs follow IEC 60945 fourth edition (2002) Maritime Navigation and Radio-communication Equipment and Systems requirements and IACS-E10 for international standards. SeaBrite™ monitors are certified by Det Norske Veritas Classification AS, and all applicable tests are approved according to DNV Standard for Certification 2.4, IEC60945 and IACS-E10.

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Specifications

Display

- 8.4" 800x600 262,144 (6bits/color) LCD, sunlight readable
- 10.4" 800x600 16.7 M (8bits/color) LCD, sunlight readable
- 12.1" 1024x768 262,144 (6bits/color) LCD, sunlight readable
- 15" 1024x768 16.7M (8bits/color) LCD, sunlight readable
- 17" 1280x1024 16.2M (6bits+FRC) LCD, sunlight readable
- 19" 1280x1024 16.2M (6bits+FRC) LCD, sunlight readable
- 20.1" 1600x1200 16.7M (8bits/color) LCD, sunlight readable
- 23.1" 1600x1200 16.7M (8bits/color) LCD, sunlight readable

Brightness (typical)

- 520 (8.4")
- 560 (10.4")
- 300 (12.1")
- 400 (15")
- 475 (17")
- 500 (19")
- 350 (20.1")
- 250 (23.1")

Pixel Pitch (HxV)

- .213 x .213 (8.4")
- .264 x .264 (10.4")
- .240 x .240 (12.1")
- .297 x .297 (15")
- .264 x .264 (17")
- .294 x .294 (19")
- .255 x .255 (20.1")
- .294 x .294 (23.1")

Contrast Ratio (typical)

- 250:1 (8.4")
- 500:1 (10.4")
- 550:1 (12.1")
- 350:1 (15")
- 500:1 (17")
- 550:1 (19")
- 700:1 (20.1")
- 500:1 (23.1")

Viewing Angles

- +/-50° X axis; -30° to +60° Y axis (8.4")
- +/-70° X axis; -60° to +50° Y axis (10.4")
- +/-65° X axis; -75° to +45° Y axis (12.1")
- +/-85° X axis; -80° to +70° Y axis (15")
- +/-70° X axis; -60° to +70° Y axis (17")
- +/-70° X axis; -60° to +75° Y axis (19")
- +/-89° X and Y axis (20.1")
- +/-85° X and Y axis (23.1")

Active Display Area (HxV)

- 170.4 mm x 127.8 mm (8.4")
- 211.2 mm x 158.4 mm (10.4")
- 245.76 mm x 184.32 mm (12.1")
- 304.128 mm x 228.096 mm (15")
- 337.92 mm x 270.336 mm (17")
- 376.32 mm x 301.06 mm (19")
- 408 mm x 306 mm (20.1")
- 470.4 mm x 352.8 mm (23.1")

Input Signals

- RGB Signal -- D-SUB 15P connector
- Composite Video– RCA phone plug
- S-Video Signal – S-Video (SVHS) plug
- DC Power Signal – Screw terminal block
- DVI-D Signal – DVI-D input 24 pin connector (not available on 8.4"units)

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User Controls

- Power On/Off via front button
- VR brightness control knob
- On Screen Display control (OSD)
- OSD remote control via RS-232 (not available on 8.4"units)
- Power mode status LED

Environmental

- -10° to +55° C (operating)
- 5% to 95% (non condensing humidity)

Mechanical

- Flush, panel-mount with IP65
- VESA mounting (standard on 8.4", 10.4", 12.1" and 15" units)

Power Specifications

- 8 to 36V DC to DC power supply with terminal block
- 1 x DC terminal block power input
- 13W typical, normal operation (8.4")
- 21W typical, normal operation (10.4")
- 32W typical, normal operation (12.1")
- 40W typical, normal operation (15")
- 48W typical, normal operation (17")
- 45W typical, normal operation (19")
- 70W typical, normal operation (20.1")
- 80W typical, normal operation (23.1")

Shock

- 15G, 11ms duration

Vibration

- 5 Hz to 500 Hz / 1 Grms / 3 Axis

Compliance

- CE, FCC, RoHS 2002/95/EC
- IEC60945
- IACS-E10
- NEMA 4 certification on request

Options

Touchscreen

- SAW (surface acoustic wave); IP54 only
- 5 wire resistive

Safety Glass

- 3mm anti-reflective protection glass

Input Signals

- AC Power Signal – Std IEC Inlet (available on units utilizing 12.1" and higher LCDs)
- D-SUB 9P connector (female) for touchscreen (not available on 8.4"units)
- D-SUB 9P connector (female) for remote via RS-232 (not available on 8.4"units)

Power Supply

- 90 to 265V AC (available on units utilizing 12.1" and higher LCDs)

Extended Operating Temperature

- -20° to +60° C (available on units utilizing 12.1" and 15" LCDs)

Mechanical

- VESA mounting (available upon request for units utilizing 17" and higher LCDs)

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8.4"					17"				
	Ambient light (nit)	10,000	30,000	80,000		Ambient light (nit)	10,000	30,000	80,000
	Brightness gain (nit)	432.7	620	1180		Brightness gain (nit)	490	630	900
	Reflectance (net)	1.2%	1.15%	1.16%		Reflectance (net)	.83%	.7%	.45%
10.4"					19"				
	Ambient light (nit)	10,000	30,000	80,000		Ambient light (nit)	10,000	30,000	80,000
	Brightness gain (nit)	437.5	670	1150		Brightness gain (nit)	500	630	830
	Reflectance (net)	1.2%	1.15%	1.1%		Reflectance (net)	.5%	.65%	.4%
15"					20.1"				
	Ambient light (nit)	10,000	30,000	80,000		Ambient light (nit)	10,000	30,000	80,000
	Brightness gain (nit)	680	870	1320		Brightness gain (nit)	312.5	456	680
	Reflectance (net)	1%	.98%	.9%		Reflectance (net)	.7%	.68%	.45%

Note: Equivalent brightness under sunlight. Due to Panel material's deviation, different panel supplier will set different specific variance range to optical characteristics. The factors of time used, lamp current, ambient temperature will influence the optical measurements.

About Computer Dynamics

Computer Dynamics (A GE Fanuc Intelligent Platforms Company) is a leading global provider of flat panel display solutions for a wide range of industries and applications. Our comprehensive product offering includes open-frame, enclosed, and environmentally sealed flat panel display systems in both computer and monitor configurations. The company is headquartered in the U.S. and is a part of GE Fanuc Intelligent Platforms Embedded Systems. Whether you're looking for one of our standard products or a fully custom solution, Computer Dynamics has the breadth, experience and 24/7 support to deliver what you need. For more information, visit www.cdynamics.com.

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Additional Resources

For more information, please visit the Computer Dynamics web site at:

www.cdynamics.com

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