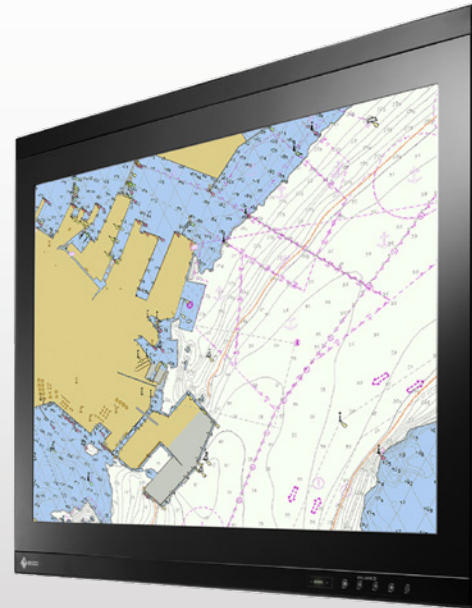


FDS1904



FDS1904T

## Panel Mount Marine Monitors with LED Backlight for ECDIS / RADAR Applications

### Durable and Reliable

The FDS1904 and FDS1904T offer durability for use in harsh maritime environments, complying with the conditions for temperature, humidity, and vibration as defined in the IEC 60945 international standard for maritime navigation and radio communication equipment and systems. IP65 rating ensures they can withstand dust ingress and are protected against low-pressure water jets. A coating is applied to make the electronic substrates moisture-proof and the cooling fan is easily accessible for exchanging purposes.

### Approval from Classification Societies

The monitors meet the requirements for major maritime classifications with approvals for LR(UK), DNV GL (Norway / Germany), ABS (USA), and NK (Japan). Additional certifications are available on request.

### Long-Lasting LED Backlight

The monitors are equipped with an LED backlight. Compared to conventional CCFL backlights, LED backlights last longer and consume less power. They are also mercury-free for minimal impact on the environment.

### Calibrated for ECDIS

Backlight brightness, gamma, and RGB color settings are calibrated at the factory so each monitor achieves accurate color reproduction for meeting the highly specialized requirements of ECDIS systems. Both monitors meet IEC 61174, IEC 62288, and IEC 62388 international standards for ECDIS and RADAR applications.

### Wide Dimming Range

The wide dimming range of less than 1 cd/m<sup>2</sup> up to 590 cd/m<sup>2</sup> (540 cd/m<sup>2</sup> for the FDS1904T) allows you to adjust to the appropriate brightness level for viewing during the day or at night.

### Clear View

The VA panel features wide viewing angles that minimize changes in contrast and gradation to maintain excellent visibility when the screen is viewed from the side. An AR coating is applied to reduce the amount of reflections on the screen for a clear display.

### Touch Panel Model

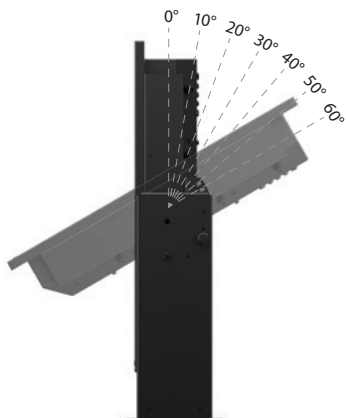
The FDS1904T features a projected capacitive touch panel that accepts touch input from a bare hand or special stylus and supports multitouch operation. It is also highly resistant to dust and water droplets to minimize unintended input.

### Optical Bonding for High Visibility

Optional optical bonding is available for both models. Optical bonding significantly reduces reflective light for high visibility even when the screen is viewed in direct sunlight. A screen with optical bonding is also more resistant to applied pressure, giving it increased physical durability.

## Optional Stand

An optional stand is available with the monitors which allows tilt positioning from 0 - 60 degrees. The stand, when combined with the monitors, complies with the conditions for temperature, humidity, and vibration as defined in IEC 60945. It also meets the requirements for LR (UK), DNV GL (Norway / Germany), ABS (USA), and NK (Japan).

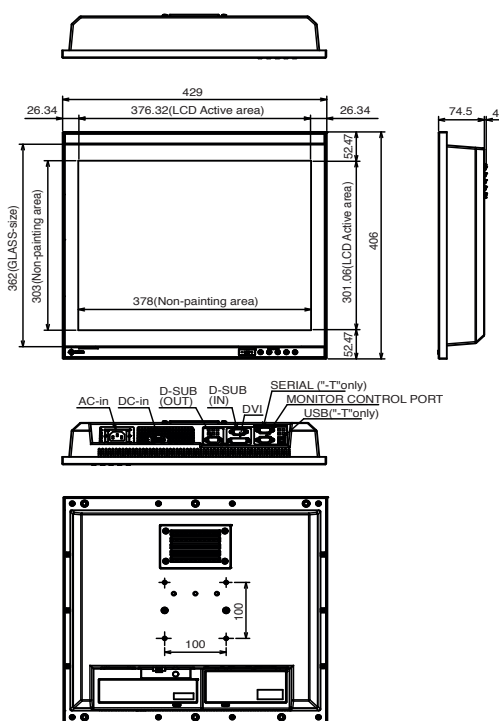


MDS-T191

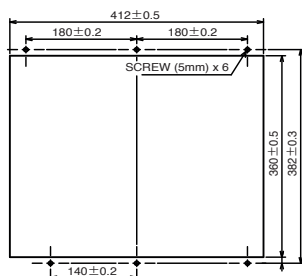
## Additional Features

- 24-Hour Use, 3-Year Warranty
- ECDIS Indicator
- Marine Alarm Buzzer

## Dimensions (mm)



Panel aperture dimensions



## SPECIFICATIONS

Model Variations		FDS1904 / FDS1904-OP	FDS1904T / FDS1904T-OP
Cabinet Color		Black	
Panel	Type	VA	
	Backlight	LED	
	Size	19" / 48 cm	
	Native Resolution	1280 x 1024 (5:4 aspect ratio)	
	Viewable Image size (H x V)	376.3 x 301 mm	
	Pixel Pitch	0.294 x 0.294 mm	
	Display Colors	16.77 million	
	Viewing Angles (H / V, typical)	178°, 178°	
	Brightness (typical)	590 cd/m <sup>2</sup> (-OP: 600 cd/m <sup>2</sup> )	540 cd/m <sup>2</sup> (-OP: 580 cd/m <sup>2</sup> )
	Contrast Ratio (typical)	2000:1	
	Response Time (typical)	20 ms (black-white-black)	
Touch Panel	Type	-	Projected Capacitive
	Touch Points	-	5
	Surface Treatment	-	Anti-Glare coating, Anti-Finger printing
	Communication Protocol	-	USB, RS-232C
	Touch Life	-	50 million touches (minimum)
	Surface Hardness	-	5H
	Compatible OS	-	Windows 10 / 8.1 / 7 (64-bit, 32-bit), Windows XP (32-bit)
Video Signals	Input Terminals	DVI-D (HDCP1.4), D-Sub mini 15 pin	
	Analog Scanning Frequency (H / V)	31 - 80 kHz, 56 - 76 Hz	
	Sync Formats	Separate, Composite	
USB	Upstream	-	USB 2.0: Type-B
Power	Power Requirements	AC 100 - 240 V, 50 / 60Hz DC 24 V	
	Maximum Power Consumption	64 W	
	Power Save Mode	9 W or less (AC input) / 6 W or less (DC input)	
	Standby Mode	7 W or less (AC input) / 5 W or less (DC input)	
Features & Functions	Preset Modes	Color Mode (Custom, Day, Dusk, Night)	
	Communication Interface	D-Sub mini 15 pin, DVI-D 24 pin, RS-232C	
	Communication Protocol	DDC/CI, RS-232C	
Physical Specifications	Dimensions (Panel Mount, W x H x D)	429 x 406 x 75 mm	
	Net Weight (Panel Mount)	5.9 kg / 13 lbs (-OP: 6.2 kg / 13.7 lbs)	6.4 kg / 14.1 lbs (-OP: 6.7 kg / 14.8 lbs)
	Hole Spacing (VESA Standard)	100 x 100 mm, M4, screw depth 6 - 12.5 mm	
Environmental Requirements	Operating Temperature	-15 - 55 °C	
	Operating Humidity (R.H., non condensing)	10 - 90%	
	Degree of Protection	IP65 (front) / IP22 (Rear)	
Safe Distance of Nautical Equipment from Compasses	Standard Compass	0.90 m	
	Steering Compass	0.60 m	
Certifications & Standards (Please contact EIZO for the latest information.)		Ship Classification: NK (Japan), LR (UK), ABS (US), DNV-GL (Norway / Germany) General: CB, CE, EAC, RoHS, WEEE, China RoHS, IEC60945 (EMC/environmental testing), IEC61174 / IEC62288 / IEC62388 (items for monitor), KC (K60950-1, K00022, K00024)	
Supplied Accessories (May vary by country. Please contact EIZO for details.)		others	Setup manual, CD-ROM, Cleaning cloth
Warranty		3 years, 24-hour use	