

## **17" Rugged Modular Flat Panel Display** **MDR1817R Series**

The MDR1817R is a 17" Rugged cost-effective LCD replacement for the Barco MRFD-243. Package in a rugged Panel-Mount enclosure, this monitor is designed for Extremely Harsh Environments for use in demanding applications that require graphics, video, and other RGB data on a single, rugged display. These NEMA 4 (IP65) Military Grade Flat Panel Displays are designed with shock and vibration safeguards, provisions for extreme temperature operation, high moisture safeguards, as well as Electromagnetic Environmental Interference protection for use in extreme vibration and/or harsh weather conditions found in many Land-based, Airborne, and Shipboard Military Applications.

Target application platforms for the MDR1817R Rugged COTS LCD Monitors include: fixed-wing aircraft, helicopters, surface ships, submarines, ground vehicles, and mobile shelters.

Though rugged enough for most Land-based, Airborne, and Shipboard Applications, the MDR1817R 17" rugged LCD is versatile, as well. With options for 3 / 4 / 5 Wire BNC Inputs and RS17 / RS 343 Video Operation, the MDR1817R COTS LCD Monitors allow for easy insertion into legacy technologies and lower obsolescence risks.



With a Solid State LED Backlight and Full-Range Dimming to black, the rugged MDR1817R LCD Military-Grade Monitor can be fitted with an LED Filter Backlight for NVIS Operation

*If you need COTS Sealed Monitors, Rugged Marine Monitors, or just have a general-purpose need for rugged computer monitors, our new MDR1817R COTS LCD Monitors is a COTS solution for your rugged display*

### **Features:**

- 17.0 In SXGA TFT LCD Display with Solid State LED Backlight - 1280 x 1024 Native Resolution.
- High Contrast: 1000:1 Typical.
- High Bright TFT Display: 1200 Nits
- Wide Viewing Angle: 85R/85L – 80U/80L.
- Bonded Anti-Glare Protective Faceplate Glass for Superior Optical Performance and Enhance Protection on Extreme Environments.
- Standard VESA VGA + DVI Input Timings.
- 90-264VAC Auto Ranging Internal AC Power Supply.
- Aspect Ratio: 1:1 or 4:3 (OSD Selection).
- Front Manual Full Range Brightness and Contrast Control (Dimming).
- Extended Operating Temperature Rating: -30°C to +85°C.

- Conformal Coating of Internal Assemblies for Enhanced Ruggedness.
- Heavy Duty Aluminum Front Bezel.
- NEMA 4/12 & IP65 Front Panel.

### **Options:**

- Custom Designs Based on Customer's Exact Needs.
- 12VDC, 24VDC, 28VDC, and 48VDC Input Voltage.
- Analog RGB Sync On Green (SOG), Composite Sync or Separate Sync Inputs (5 BNC).
- RS-170 (525 Line) & RS-343 (875-Line) Interlace Formats.
- NTSC/PAL Composite Video (RCA Jack) and S-Video (4 Pin Mini-Din). Differential Monochrome Video Input for Enhanced Noise Immunity.
- Touch Screen: Resistive, Capacitive, and SAW.
- Wireless Remote Control.

## **17" Rugged Modular Flat Panel Display (1280 x 1024)**

### **MRD1817R Series**

LCD Size & Technology	17.0" SXGA Color TFT-LCD
Viewing Area	337.9 (H) mm x 270.4 (V) mm
Pixel Pitch	0.264 mm x 0.264 mm
LED Life (min)	10,000 Hours minimum
Viewing Angle (H/V, Typical)	75° (Left), 75° (Right) / 70° (Up), 60° (Down) @ CR = 10
Contrast Ratio (Typical)	1000:1
Brightness (Typical)	1200 cd/m <sup>2</sup>
Response Time	Tr = 2 ms, Tf = 6ms Typical
Colors	16.2M Colors
Supported Video Formats	Up to 1280 x 1024 @ 60 and 75 Hz - Optimal Native Resolution Legacy Products 15 to 100KHz Horizontal Freq.
Input Video Signals	Video: 0.7 Vpp @ 75 Ohms Sync: Separate or Composite Sync TTL Level; Sync on Green Video (SOG) 0.7 Vpp-Sync 0.3 Vpp Horizontal: 15 to 100KHz; Vertical 50 to 75 Hz
Input Video Interface	HD15 (VGA Analog) & DVI-D
External Connectors	Analog HD15 D-Sub Input; Digital DVI Input, DC or AC Input.
Power Requirements	100-240 VAC 50-60 Hz or +12 VDC @ 3A
EMI/EMC Agency Approvals	FCC, CE, UL
Temperature	Operating: 0° to 50°C @ 5-90% R.H. Storage: -20° to 60°C @ 5-90% R.H
Humidity	Operating: Max. 95% @ 40°C non-condensing
Altitude - Operating	Operating: Up to 10,000 ft Storage: Up to 30,000 ft
Shock	Operating: <b>Call Sales for more information</b> Storage: 50 G
Cold Start-Up	Start-up @ -25°C 3min. usable picture 20 min. full spec
Vibration	Operating: <b>Call Sales for more information</b> Storage: 1.5 G
Drip Proof - Operating	<b>Call Sales for more information</b>
Fungus	<b>Call Sales for more information</b>
Salt Fog	<b>Call Sales for more information</b>
Sand Dust	<b>Call Sales for more information</b>
Crash Proof – Non Operating	<b>Call Sales for more information</b>
Rapid Decompression	<b>Call Sales for more information</b>
Safety	IEC 60950
Mechanical Configuration	Modular Mount
Dimensions	345mm (H) x 426" (W) x 105.9" (D)
Bezel Finish	Aluminum - Black Epoxy Powder Paint with Wrinkle Finish
Construction	Metal Ruggedized for Industrial Applications
Weight	20 Lb.
Warranty	Two-Year Limited Warranty
Options	Touch Screen: Surface Acoustic Wave (SAW) and Resistive Screen Protection from Impact - Strengthened Glass NTSC / PAL NVIS Class A & B 5 BNC Input (RGB) TTL Video Input Option for EGA, CGA and MDA