

19" COTS Tabletop Rugged LCD Display MRD1819-085 Metal Enclosure

Our 19" COTS Tabletop Rugged LCD Display (MRD-Series) was designed with shock and vibration safeguards provisions for extreme environments and electromagnetic environmental interference protection for use in extreme harsh conditions found in many rough COTS Military Display Applications.

This unit is capable of operating with legacy timing such as RS-170 (525 Line) and RS-343 (875-Line) Interlace formats. Also, NTSC/PAL Video (RCA Jack), S-Video (5 Pin Mini Din) and VGA (HD15-DSub) Standard VESA Input Timings. With the availability of selecting aspect ratios of 1:1 or 4:3 on all video inputs through the use of the On Screen Display (OSD) Menu.

The MRD1819-085 is a 19" cost effective LCD Display, packaged in a heavy duty cold roll steel enclosure with heavy duty aluminum front bezel, internal rugged construction and bonded Anti-Reflective protective faceplate glass for superior optical performance and better protection on extreme environments. These features makes this 19" COTS Tabletop Rugged LCD Display unit great for use in demanding applications that require graphics, video, and other RGB data on a single, rugged display.



Target application platforms for the MRD1819-085 Series Rugged LCD Military Display Monitors include: Surface Ships Displays, Air Traffic Control, Military Navigation Display Monitor and Commercial-off-the-shelf (COTS) Military Displays Applications.

Features:

- 19.0" SXGA Color TFT LCD with Solid State LED Backlight Module.
- High Bright Active Matrix TFT Display, 300 Nits.
- High Contrast 2000:1 Typical.
- Bonded Anti-Reflective Protective Faceplate Glass for Superior Optical Performance and Better Protection on Extreme Environments.
- RS-170 (525 Line) and RS-343 (875-Line) Interlace Formats.
- 15.75 to 100 KHz -Specially designed for Slow Scan Signals - Legacy Timings.
- 5 BNC RGB Sync On Green, RGB Separate Composite Sync or RGB Separate Sync.
- NTSC/PAL (RCA Jack) and S-Video (5 Pin Mini Din).
- VGA HD-15D-Sub. Standard VESA Input Timings.
- Aspect Ratio: 1:1 or 4:3 (OSD Selection).
- Vertical Interlace Adjust and Horizontal Position Adjustment.

- · Convenient Front Controls.
- VESA 75/100 Standard Mounting.
- · Heavy Duty Aluminum Front Panel.
- Heavy Duty Cold Roll Steel Chassis.
- Internal Ruggedized Construction.
- Picture-In-Picture (PIP).
- Picture-Outside-Picture (POP).
- 110 / 220 VAC or 12VDC.
- Full-Range Dimming to Black.

Options:

- 91 Ohm Video Termination.
- Front Manual Full Range Brightness and Contrast Control (Dimming)
- · Wireless Remote Control.
- High Brightness TFT LCD Option 1,500 Nits

19" COTS Rugged LCD Display MRD1819-085 Metal Enclosure

Specifications:	
LCD Size & Technology:	19.0" SXGA Color TFT LCD
	376.32 mm (H) x 301.06 mm (V) – 14.82" (H) x 11.85" (V)
Viewing Area:	
Pixel Pitch:	0.294 mm x 0.294 mm
1	50, 000 Hours
Viewing Angle (H/V, Typ.):	178° / 178° @ CR = 10
Contrast Ratio (Typ.):	2000:1
Brightness (Typ.):	300 Cd/m ²
Response Time (Typ. On/Off):	20 ms
Display Colors:	16.7M Colors
Supported Video Formats:	1280 x 1024 @ 60 and 75 Hz - Optimal Native Resolution
	Legacy Timing: 15KHz to 100KHz @ 55 to 85Hz.
Input Video Signals:	Video Analog: 0.7 Vpp @ 75 Ohms
	Sync: Separate or Composite Sync TTL Level (Positive/Negative)
	Sync on Green Video 0.7 Vpp and Sync 0.3 Vpp
Video Input Interface:	HD15 (VGA Analog), 5 BNC and AV Video (RCA Jack & Din-4)
External Connectors:	Analog HD15 D-Sub Input; 5 BNC, DC or AC Input.
	OSD (On Screen Display) – Full functions
<u>Environmental</u>	
Temperature:	Operating: -0°C to 50°C
	Storage: -20°C to 60°C
Cold Start-Up:	Start-up @ 0°C 10min usable picture. 20 min. full spec.
Humidity:	Operating/Storage: 10 to 90% RH @ 40°C Non-Condensing.
Altitude Test:	Operating: 0 to 10,000 ft. above sea level
	Storage: 0 to 30,000 ft. above sea level
Shock:	Acceleration: 50G
	Storage Wave: Half-Sine
	(Non-Operational): Active Time: 20 ms
	Direction: ±X, ±Y, ±Z (One Time for Each Axis)
	Acceleration: 1.5G
Vibration:	Storage Wave: Random
	(Non-Operational): Frequency: 10 200 -10Hz
	Sweep: 30 Minutes each Axis (X, Y, Z)
Drop Test:	Height: 60 CM, Package Test
Thermal Shock:	-20°C/30 min, 60°C/30 min, 100 Cycles
Power Requirements:	Power Supply: 100-240 VAC Auto Ranging 50-60 Hz (Internal) or +12 VDC @ 3A (External).
	Power Dissipation: 48 Watts
Power Connector:	IEC320 Power Cord Standard
	Height: 14.67" or 18.5" with Tilt and Swivel Base
Dimensions & Weight:	Width: 17.15"
	Depth: 3.3" or 11.4" with Tilt and Swivel Base
	Weight: 14.1 Lb. without Tilt & Swivel Base or Weight: 21.8 Lb. with Tilt & Swivel Base
Mechanical Configuration:	Table Top or VESA 75/100
Bezel Finish:	Aluminum - Black Epoxy Powder Paint with Wrinkle Finish
Construction:	Metal Ruggedized for Severe Environments. All hardware secured with Loctite
Warranty	Two Year Limited Warranty
	The state of the s

