

19 In Color Military Grade COTS Display MRD1819C-RM Series



The MRD1819C-RM Series is a 19 In Color Military Grade COTS Display designed to operate in rugged environments and also developed with high performance, reliability and durability in mind. The rugged mechanical and electrical design makes this monitor ideal for operations where Military Rugged Displays are required.

Features include High Contrast Ratio (1000:1), High Brightness Level (1000 Nits), Wide Operating Temperature Range, Bonded Anti-Reflective Protective Faceplate Glass for Superior Optical Performance and Better Protection on Extreme Environments, STANAG 3350 Video and Monochrome RS-170 Video compatible. These monitor features make the COTS Military LCD display great for applications such as;

Air Traffic Control, Airborne, Aviation Display, Ground Mobile, Military Navigation Display Monitor, Ship Board (Submarine and Surface Warship), Shipboard Automation, Stationary Air Defense Systems.

The MRD1819G-RM is capable of operating with legacy signal timings such as Monochrome RS-170 and STANAG 3350 Video Interlace formats. Also, NTSC/PAL Video (RCA Jack), S-Video (4 Pin Mini Din) and VGA (HD15-DSub) Standard VESA Input Timings.

If you need COTS Military Display, Ground Control Station – GCS, Rugged COTS Monochrome Monitor, or just have a general-purpose need for rugged computer monitor, the MRD1819G-RM series of COTS LCD Monitors is an excellent solution for your rugged display requirements.

Features:

- 19" Active Matrix High Bright TFT LCD with Solid State LED Backlight
- 1280 x 1024 Native Resolution
- High Bright TFT Display - 800 Nits
- High Contrast – 1000:1 Typical
- Monochrome RS-170 or STANAG 3350 Video signal Compatible
- NTSC/PAL (RCA Jack) and S-Video (4 Pin Mini Din)
- DVI-I and VGA Inputs
- Convenient Front Controls
- Aspect Ratio: 1:1 or 4:3 (OSD Selection)
- Picture In Picture (PIP) and Picture-Outside-Picture (POP) Capable
- Image Size & Position Adjustment
- 90-264 VAC or 12VDC Power
- Bonded Anti-Glare Protective Faceplate Glass for Superior Optical Performance and Better Protection on Extreme Environments
- Heavy Duty Aluminum Front Bezel
- Heavy Duty Cold Roll Steel Chassis

- VESA 100 Standard Mounting
- Conformal Coating of Internal Assemblies for Enhanced Ruggedization
- Front Manual Full Range Brightness and Contrast Control (Dimming)
- Custom Designs including Spec, Color, Finish and Format
- Designed, Engineered and Built to comply with Military Standards

Options:

- 24V, 28 and 48V DC Input Voltage Options
- Wireless Remote Control
- 3 Buffered Unity-Gain BNC Outputs (RGB)
- 91 Ohm Video Termination
- Differential Video Input for Enhanced Noise Immunity
- Integrated Heaters for Extended Operational Temperature Capabilities
- Touch screen option (SAW, Resistive and Capacitive)
- Full-Range Dimming to Black

19 In Monochrome Military Grade COTS Display
MRD1819C-RM Series

<i>Specifications:</i>	
LCD Size & Technology:	19.0" SXGA TFT-LCD
Viewing Area:	376.32 mm (H) x 301.06 mm (V) – 14.82" (H) x 11.85" (V)
Pixel Pitch:	0.294 mm x 0.294 mm
LED Life Time (min):	50,000 Hours
Viewing Angle (H/V, Typ.):	178° / 178° @ CR = 10
Contrast Ratio (Typ.):	2000:1
Brightness (Typ.):	1000 Cd/m ²
Response Time (Typ. On/Off):	20 ms
Display Colors:	256 colors per one sub-pixel (8 bit)
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), 3 BNC (SOG) and RCA Jack (NTSC). Customer Option: BNC, Triax or Type N.
External Connectors:	Analog Video and Input Power
Display Controls	OSD (On Screen Display) – Full functions
<i>Environmental</i>	
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:	Storage: Acceleration: 50G Wave: Half-Sine (Non-Operational): Active Time: 20 ms Direction: ±X, ±Y, ±Z (One Time for Each Axis)
Vibration:	Storage: Acceleration: 1.5G 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
Dimensions & Weight:	Height: 9 Units – EIA RS310D Width: 19" Depth: 4.95" Weight: 20.5 Lb.
Mechanical Configuration:	Rack Mount: 9 Units – EIA RS310D
Bezel Finish:	Aluminum - Black Epoxy Powder Paint with Wrinkle Finish
Construction:	Metal Ruggedized for Severe Environments. All hardware secured with Loctite
Options	High Brightness TFT LCD Option - 1,000 Nits Wireless Remote Control Option S-Video (4 Pin Mini Din) Differential Video Input for Enhanced Noise Immunity Touch Screen: Resistive, Capacitive and SAW 91 Ohm Video Termination. 12VDC, 24VDC or 28VDC Input Voltage
Warranty	Two Year Limited Warranty

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