

19 In Monochrome Military Grade COTS Display MRD1819G Metal Enclosure Series



The MRD1819G Series is a **19 In Monochrome Military Grade COTS Display** designed to operate in rugged environments and also develop with high performance, reliability and durability in mind. The rugged mechanical and electrical design makes this monitor ideal for operate where **Military Rugged Display** are required.

Features include High Contrast Ratio (1000:1), High Brightness Level (1300 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 monitors features makes 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 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 series of **COTS LCD Monitors** is an excellent solution for your rugged display requirements.

Features:

- 19" Monochrome Active Matrix High Bright TFT LCD with Solid State LED Backlight
- 1280 x 1024 Native Resolution
- High Bright TFT Display - 1500 Nits
- High Contrast – 1000:1 Typical
- Full-Range Dimming to Black
- **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-Reflective 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 Enhance 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)

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Specifications:		
LCD Size & Technology:	19.0" SXGA Monochrome 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.):	1000:1	
Brightness (Typ.):	1300 Cd/m ²	
Response Time (Typ. On/Off):	25 ms	
Display Colors:	256 gray scales 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), 5 BNC and AV Video (RCA Jack & Din-4) Customer Option: BNC, Triax or Type N.	
External Connectors:	Analog Video and Input Power	
Display Controls	OSD (On Screen Display) – Full functions	
Environmental		
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 (Non-Operational):	Acceleration: 50G Wave: Half-Sine Active Time: 20 ms Direction: ±X, ±Y, ±Z (One Time for Each Axis)
Vibration:	Storage (Non-Operational):	Acceleration: 1.5G Wave: Random 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: 14.67" or 18.5" with Tilt and Swivel Base 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 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	

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