# MSM2VR

## MIL SPEC MONITOR - RGB & RS170 INPUT

On today's digital battlefield, rugged hardware must be designed to operate in any environment. DSE designs and manufactures highly reliable military COTS displays that meet and exceed key military specifications including MIL-STD-461, 810 and 1275.


## STANDARD FEATURES

- (3) RS-170 Inputs, PIP Capable
- (1) Analog RGB Video Input
- SVGA Resolution (800x600)
- Auto Sensing NTSC/PAL
- MIL-C Connectors*
- LED Backlight (3000:1 Dimming Ratio)
- Anti-Reflective and Anti-Glare Treatments
- Enhanced Sunlight Readability
- IP67/NEMA 6 Enclosure
- Tactile Buttons
- 8.4", 10.4", 12.1" and 15.0" TFT AM LCD
- MIL-STD-461, 810, 1275 Compliant

## OPTIONAL FEATURES

- Analog Resistive Touch Screen
- XGA Display Resolution (1024x768)
- NVIS MIL-STD-3009 Class B White Compliant
- Night Vision Compatible – Monochrome Red/Green

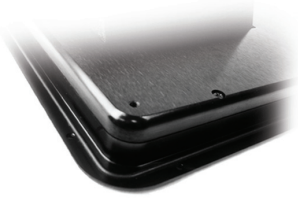
* Cables not included

## STANDARD

**Panel Mount**

**RAM Mount**
(#220901 or #220916)

## OPTIONS



**Flush Mount**

**Rack Mount**

| LCD Size | Resolution | Nits | Viewing Angle | Contrast Ratio | Maximum Power Consumption |
|---|---|---|---|---|---|
| **8.4" TFT AM LCD** | SVGA (800x600) | 800 nits | 160° (H) x 160° (V) | 900:1 | 20 Watts |
| **10.4" TFT AM LCD** | SVGA (800x600) | 800 nits | 160° (H) x 160° (V) | 900:1 | 20 Watts |
| **10.4" TFT AM LCD (Optional)** | XGA (1024x768) | 1,000 nits | 160° (H) x 130° (V) | 700:1 | 20 Watts |
| **12.1" TFT AM LCD** | SVGA (800x600) | 550 nits | 160° (H) x 140° (V) | 600:1 | 20 Watts |
| **12.1" TFT AM LCD (Optional)** | XGA (1024x768) | 1,000 nits | 160° (H) x 140° (V) | 600:1 | 20 Watts |
| **15.0"TFT AM LCD** | XGA (1024x768) | 800 nits | 160° (H) x 140° (V) | 800:1 | 40 Watts |

| **Technical Specifications** | |
|---|---|
| **Display** | 8-bit color, 16,777,216 colors |
| **Dimming Ratio** | 3000:1 |
| **Video Inputs** | ▪ (1) RGB<br>▪ (3) NTSC and PAL (B,D,G,I,K) |
| **Connectors*** | MIL-C Connectors |
| **Housing** | Milled AL, Black Hard Anodized |
| **Mounting** | Flush, Panel, Rack or RAM Mount |
| **Wide Range DC Power Input†** | 10-36 VDC (12,24,28 VDC nominal) |
| **Power Conditioning** | Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity |
| **Environmental Specifications** | |
| **IP Rating** | IP67 (NEMA 6 Submersible) |
| **Operating Temperature** | -40°C to 71°C (-40°F to 160°F); (-20°C (-4°F) with Touch Screen Option) |
| **Storage Temperature** | -51°C to 71°C (-60°F to 160°F) |
| **Humidity** | 0-100% |
| **Altitude** | 45,000 ft. |

| **Military Specifications** | | | |
|---|---|---|---|
| **MIL-STD-461** | EMI | **MIL-STD-810** | Method 512; Immersion |
| **MIL-STD-704** | Aircraft Power Requirements | **MIL-STD-810** | Method 513; Acceleration |
| **MIL-STD-810** | Method 500; Altitude | **MIL-STD-810** | Method 514; Procedure I, II, V, VI; General Vibration |
| **MIL-STD-810** | Method 501; I & II; High Temperature | **MIL-STD-810** | Method 516; Procedure I, Functional Shock |
| **MIL-STD-810** | Method 502; I & II; Low Temperature | **MIL-STD-810** | Method 520; Temp, Humidity, Vibe and Altitude |
| **MIL-STD-810** | Method 503; Temperature Shock | **MIL-STD-810** | Method 523; Vibro-Acoustic/Temp |
| **MIL-STD-810** | Method 505; Solar Radiation | **MIL-STD-1275** | Vehicle Power Requirements |
| **MIL-STD-810** | Method 506; Rain | **MIL-STD-1472** | Thermal Contact Hazard |
| **MIL-STD-810** | Method 507; Humidity | **MIL-STD-3009** | NVIS Compatible (Optional) |
| **MIL-STD-810** | Method 508; Fungus | **MIL-PRF-22885** | Sunlight Readability for Push Buttons |
| **MIL-STD-810** | Method 509; Salt/Fog | **MIL-A-8625** | Standard Finish, Type III, Class 1 & 2 |
| **MIL-STD-810** | Method 510; Blowing Sand and Dust | **MIL-PRF-22750** | Painted Finish, Optional, Minimum Quantity Required |
| **MIL-STD-810** | Method 511; Explosive Atmosphere | **MIL-DTL-26482** | **(and 38999)** Connector, Qualified |

* - Cables not included

† - The power range specified covers momentary environmental fluctuations generally found in a mobile environment while display is operating. For power initialization and continual operation, nominal voltages are required.

***ON-GOING PRODUCT DEVELOPMENT MAY NECESSITATE DESIGN AND SPECIFICATION CHANGES WITHOUT NOTICE.***



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