



Military Grade Extreme Duty Waterproof Ultrabright Computer and Video Monitor

The MPC-ML2VR Series is a 2nd generation Military Grade marine flat panel Active Matrix LCD Monitor designed for rugged use where environmental conditions and operational reliability are beyond normal limits. The MPC-ML2VR is designed to meet applicable military standards MIL-STD-810G, MIL-STD-461E and others. The MPC-ML2VR is available in 8.4", 10.4", 12.1" and 15.0" sizes and has an extremely bright up to 1,000 nit display for use full sunlight but dimmable to under 1 nit for use on blackout nights without destroying the user's night vision. The MPC-ML2VR is also available to authorized users with MIL-STD-3009 NVIS Red/Green for use with NVG's. This results in the maximum in readability in any situation. Front mounted display setup and dimming control adjusts the display qualities and brightness with pushbutton simplicity. The MPC-ML2VR connects to any standard RGB video source such as the VGA output of a PC, and to up to three RS-170 NTSC/PAL composite video inputs. Fully sealed MIL-C circular connectors on the rear allow for connection to a custom cable or to our standard 3m. power and video cables (ordered separately), and sealed BNC connectors for the video inputs. The ML2VR has a front mounted source button to allow sequential display of all sources connected. Any other input can be selected for display with the built-in Picture-in-Picture feature. The native resolution is XGA 1024x768 (800x600 for the 8.4"), but the MPC-ML2VR will auto-scale a 4:3 input resolution to fit full screen. The optional touch screen will operate perfectly even in the wettest conditions. The normal operating temperature range of -40 to 70°C (-40 to 158°F) is accomplished without heaters. The precision milled aluminum case is the smallest possible allowing mounting where others can't fit. Our sealed construction eliminates fogging and will normally give years of service with the roughest handling. Mounting is accomplished via a shock resistant adjustable ball mount, surface mount with rear studs, or ordered with the optional flush bezel. Common applications include primary display or repeater from a computer, chart plotter, blackbox radar, sounder or weather computer, and video inputs from thermal imaging, light amplified, daylight and/or underwater cameras.



MPC-ML2VR



Standard Features

- **Completely Sealed Case Rated IP67 Watertight.**
- **Designed to Meet MIL-STD-810G, 461E, others.**
- **8.4", 10.4", 12.1" or 15" Color TFT AMLCD.**
- **SVGA(800x600) Hi-Resolution LCD (15" is 1024x768).**
- **Standard Analog RGB Video from any Computer.**
- **Standard BNC (3) Coax Composite Video Inputs.**
- **Up to 1,000 nit Ultra-Bright Dimmable to <1 nit.**
- **MIL-STD-3009 NVIS Red/Green for use with NVG's.**
- **Extreme Temperature Range: -40to70°C (-40to158F).**
- **Extended Shock, Vibe and Lifecycle Withstand.**
- **RAM Shock Resistant Adjustable Ball Mount.**
- **Thin Profile Black Anodized Aluminum Case.**
- **Optional Flush Bezel for Console Mounting.**
- **Powered from 12-36 VDC or optional 120/240 VAC.**
- **Anti-Reflective Glass or Optional Touchscreen.**
- **10 Ft. (3m.) Power and RGB Cables Available.**

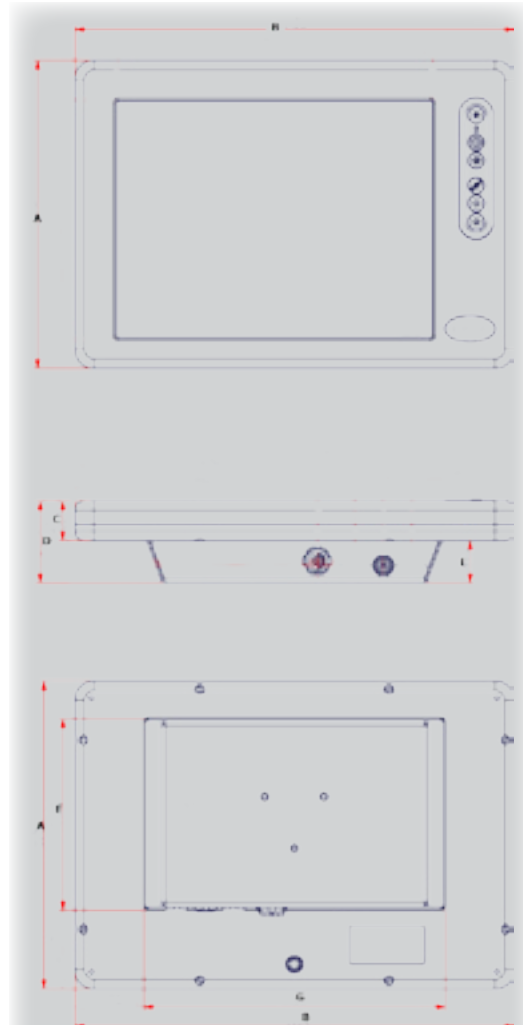


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Specifications

<ul style="list-style-type: none"> Display NVIS Option Computer Input Input Resolution Video Inputs (3) Display BIOS Touchscreen (Optional) Cables (Order Separately) Connectors Housing Mounting Weight Power Supply Power Consumption Environmental EMI/RFI MTBF 	<p>AMTFT LCD LED Backlight SVGA - 262,144 colors XGA - 1,777,216 colors</p> <table border="1"> <thead> <tr> <th>SIZE</th> <th>Resolution</th> <th>Brightness(nits)</th> <th>Viewing Angle (H x V)</th> <th>Contrast Ratio</th> </tr> </thead> <tbody> <tr> <td>8.4"</td> <td>800x600</td> <td>800</td> <td>160° x 160°</td> <td>900:1</td> </tr> <tr> <td>10.4"</td> <td>800x600</td> <td>800</td> <td>160° x 160°</td> <td>900:1</td> </tr> <tr> <td>10.4" *</td> <td>1024x768</td> <td>1,000</td> <td>160° x 130°</td> <td>700:1</td> </tr> <tr> <td>12.1"</td> <td>800x600</td> <td>550</td> <td>160° x 140°</td> <td>600:1</td> </tr> <tr> <td>12.1" *</td> <td>1024x768</td> <td>1,000</td> <td>160° x 140°</td> <td>600:1</td> </tr> <tr> <td>15"</td> <td>1024x768</td> <td>800</td> <td>160° x 140°</td> <td>800:1</td> </tr> </tbody> </table> <p>* Optional Upgrade</p> <p>MIL-STD-3009 Red/Green NVIS with Day/NVIS Selectable</p> <p>Analog RGB VGA Video from Any Standard Computer</p> <p>640x480 up to 1280x1024, 4:3 Autoscaling</p> <p>RS-170 Composite Video, NTSC/PAL Format, 3 - Coax</p> <p>Source Button Select Primary, OSD Select, Picture-in-Picture</p> <p>Analog Resistive, 1024x1024 Resolution, USB or RS-232</p> <p>Power - 10 Ft. (3m.) Sealed Cable, Flying Leads (DC only)</p> <p>Video - 10 Ft. (3m.) Sealed Cable, Standard Mini-DIN DB-15 Male</p> <p>MIL-DTL-38999 (Comp), MIL-DTL-26482 (Power), BNC (Video)</p> <p>MIL-PRF-22750F</p> <p>NEMA 6P/IP67 Rated Outdoor Weatherproof and Watertight</p> <p>Main Case Black Anodized/Clear Coated Milled Aluminum Billet</p> <p>Powder Coated Aluminum Pod, All Stainless Steel Hardware</p> <p>RAM Adjustable Shock Resistant Ball or Surface Mount Stud Kit</p> <p>Optional Flush Mount Bezel (Adds 0.45" Front Flange All Sides)</p> <p>8.4" 3.0 kg / 6.6 lbs.</p> <p>10.4" 3.5 kg / 7.7 lbs.</p> <p>12.1" 4.1 kg / 9.0 lbs.</p> <p>15.0" 5.0 kg / 11 lbs.</p> <p>MIL-STD-1275D Wide Range DC Input (12-36 VDC)</p> <p>Nominal Operating Voltages 12, 24, 28, 32 VDC</p> <p>Min: 6 watts Max: 8.4", 10.4", 12.1" - 17 Watts, 15" - 35 Watts</p> <p>MIL-STD-810G</p> <table border="0"> <thead> <tr> <th></th> <th>Operating</th> <th>Non-Operating</th> </tr> </thead> <tbody> <tr> <td>Temp. Method 501.4 & 502.4</td> <td>-40°C to 70°C (-40°F to 158°F)</td> <td>-40°C to 75°C (-40°F to 167°F)</td> </tr> <tr> <td>Relative Humidity</td> <td>0% to 100%</td> <td>Method 507.4</td> </tr> <tr> <td>Shock</td> <td>50 G</td> <td>50 G Method 516.5</td> </tr> <tr> <td>Vibration (@ 5-500 Hz sine sweep)</td> <td>5.8 G</td> <td>5.8 G Method 514.5</td> </tr> </tbody> </table> <p>MIL-STD-461E CE102, CS114, CS115, CS116, RE101, RE102, RS101, RS103</p> <p>50,000 Hrs.</p>	SIZE	Resolution	Brightness(nits)	Viewing Angle (H x V)	Contrast Ratio	8.4"	800x600	800	160° x 160°	900:1	10.4"	800x600	800	160° x 160°	900:1	10.4" *	1024x768	1,000	160° x 130°	700:1	12.1"	800x600	550	160° x 140°	600:1	12.1" *	1024x768	1,000	160° x 140°	600:1	15"	1024x768	800	160° x 140°	800:1		Operating	Non-Operating	Temp. Method 501.4 & 502.4	-40°C to 70°C (-40°F to 158°F)	-40°C to 75°C (-40°F to 167°F)	Relative Humidity	0% to 100%	Method 507.4	Shock	50 G	50 G Method 516.5	Vibration (@ 5-500 Hz sine sweep)	5.8 G	5.8 G Method 514.5
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Dim Model	A	B	C	D	E	F	G
ML208VR	6.90" 175mm	9.90" 251mm	1.10" 28mm	2.50" 64mm	1.40" 36mm	5.11" 130mm	8.04" 204mm
ML210VR	8.13" 207mm	11.60" 295mm	1.10" 28mm	2.50" 64mm	1.40" 36mm	5.11" 130mm	8.04" 204mm
ML212VR	9.20" 234mm	13.00" 330mm	1.20" 30mm	2.60" 66mm	1.40" 36mm	5.11" 130mm	8.04" 204mm
ML215VR	11.0" 279mm	14.86" 377mm	1.20" 30mm	2.60" 66mm	1.40" 36mm	5.11" 130mm	8.04" 204mm

(Note: MPC-ML products are designed to meet a broad range of MIL-STD's. Consult factory for current list of Certified Test results.)