



# 18.1" Military LCD

Designed and Tested  
for MIL-S-901D,  
MIL-STD-167 & MIL -STD-461D

**18.1" Military 9U Rack Mount LCD (Model: ARP918X)**

**18.1" Military Panel Mount LCD (Model: AAP1800)**

## Product Features

- ❑ 18.1" Color Active Matrix Liquid Crystal Display (AMLCD)
- ❑ Attractive Flush Rack Mount or Panel Mount
- ❑ Convenient Front Controls
- ❑ Designed and Tested for MIL-S-901D, MIL-STD-167, MIL-STD-461D
- ❑ High Brightness with Full Range Dimming (Standard)
- ❑ Anti-Reflective Protective Viewing Window (Standard)
- ❑ Wide Viewing Angle  $\pm 85^\circ$  (All Directions)
- ❑ HD-15 (VGA) & 5-BNC Input Video Connectors (Standard)
- ❑ Auto Ranging Internal AC Power Supply
- ❑ High Resolution 1280 x 1024
- ❑ Options: DVI-D, NTSC/S-Video Input, Brightness & Contrast Enhancements, Sunlight Readable



**Model: ARP918X & AAP1800 flat panel displays are designed for use in severe environments as encountered by the military. The ARP918X & AAP1800 are designed to meet a wide variety of applications (shipboard, airborne, and ground mobile), which require a solid mechanical design to protect the display against shock, vibration, and temperature extremes. The model ARP918X's salient features include: 15.75" (9U) high and is designed for flush mounting into a standard 19" RETMA rack enclosure. The model AAP1800 is for panel mounting in a console. Both models comply with MIL-S-901D, Grade A shock, MIL-STD-167 vibration, MIL-STD-461D for electromagnetic compatibility. The model ARP18X serves as a direct replacement for 20" CRTs.**

SPECIFICATIONS		ENVIRONMENTAL	
<b>Display</b>		<b>Humidity:</b>	
<b>Display Type:</b>	18" TFT Active Matrix LCD	Operating/Storage:	5 to 95% RH Non-condensing MIL-STD-810E, Method 507.3 Procedure 1
<b>Active Display Area:</b>	359 x 287 mm (14.135" x 11.308")	<b>Altitude:</b>	
<b>Pixel Pitch:</b>	0.28 x 0.28 mm	Operating:	0 to 42,000 ft. above sea level
<b>Brightness:</b>	180 cd/m <sup>2</sup> (Typ. w/EMI faceplate)	Storage:	0 to 54,000 ft. above sea level (MIL-STD-810E, Method 500.3)
<b>Viewing Angle:</b>	± 85 ° All directions (Typical)	<b>Rapid Decompression:</b>	RTCA/DO-160D, 8,000 ft ASL to 42,000 ft. ASL in 15 seconds, 42,000 ft. ASL to 25,000 ft. ASL in 5 minutes
<b>Contrast Ratio:</b>	300.1 (Typical)	<b>Shock:</b>	MIL-S-901D, Grade B, Class 1 Type A
<b>Response Time:</b>	25 ms (Typical)	<b>Vibration:</b>	MIL-STD-167-1, Type 1
<b>Display Colors:</b>	16 Million	<b>Drip Proof:</b>	MIL-STD-810E, Method 506.3 Procedure II, Front Panel only
<b>Synchronization Range:</b>	Horizontal: 24.8 to 91 kHz Vertical: 47.2 to 89 Hz	<b>Sand/Dust:</b>	MIL-STD-810E, Method 510.3, Front Panel only
<b>Input Signal:</b>		<b>EMI:</b>	MIL-STD-461D CE101*, CE102, RE101*, RE102 CS101, CS114, CS116, RS101, RS103 * Pass with exception
Video	Analog 0.7V p-p/75 Ohms	<b>Power Requirements:</b>	
Sync	Separate sync. TTL level Horizontal Sync Positive/Negative Vertical Sync Positive/Negative Composite Sync Positive/Negative Sync on Green (Video 0.7Vp-p and Sync 0.3Vp-p)	Power Supply:	90-132/180-264 VAC Auto Ranging (+28 VDC Optional)
<b>Input Interface:</b>	HD-15 (VGA) & 5 BNCs	Frequency:	47-440 Hz
<b>Video Input Impedance:</b>	75 Ohms	Power:	68 watts typical
<b>Resolutions Supported:</b>	640 x 480 @ 60-85 Hz 720 x 400 @ 70-85 Hz 800 x 600 @ 60-85 Hz 832 x 624 @ 80 Hz 1024 x 768 @ 60-85 Hz 1152 x 900 @ 76 Hz 1280 x 1024 @ 47-76 Hz 1152 x 864 @ 70-85 Hz	Chassis Connector:	IEC 320
<b>Native Resolution:</b>	1280 x 1024 @ 60 Hz	Cable Connector:	NEMA 5-15 P
<b>User Controls:</b>	Display Controls: Power, Brightness, Contrast, Clock, Horizontal & Vertical Position	<b>Dimensions &amp; Weight:</b>	
<b>Temperature:</b>	0°C to 50°C, MIL-STD810E Method 501.3/502.3, Procedure II -30°C to +71°C, MIL-STD-810E, Method 501.3/502.3, Procedure I Optional: -40°C storage available	<b>Rack Mount (ARP918X)</b>	<b>Rack Mount (AAP1800)</b>
		<b>Height:</b>	15.75" (9U)
		<b>Width:</b>	19.00"
		<b>Depth:</b>	3.70"
		<b>Weight:</b>	21.5 Lbs.
			22.5 Lbs.
		<b>Compatibility:</b>	PCs, Workstations, & X-Terminals
		<b>Options:</b>	DVI-D, NTSC/S-Video Input, Brightness & Contrast Enhancements, Sunlight Readable
		<b>Touch Screens:</b>	Capacitive



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