

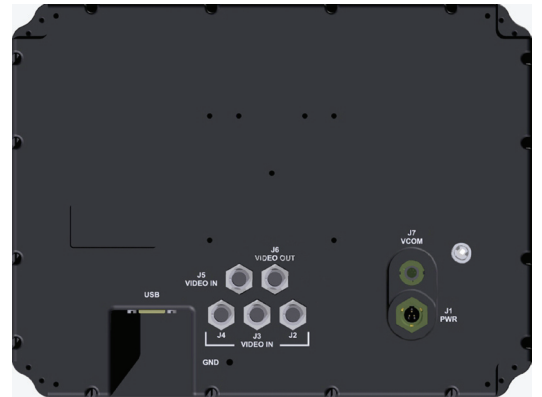
# PSM

## PROGRAMMABLE SURVEILLANCE DISPLAY SERIES

The Programmable Surveillance Monitor (PSM) series of rugged MIL SPEC monitors includes an integrated Digital Video Recorder (DVR), with capable of real-time recording and playback. The full-frame rate video, with H.264/MPEG-4 compression and embedded time stamping up to 1/100th of a second, is downloadable via USB port. These highly ruggedized displays offer ASCII or HEX code (via RS-232 or RS-422) protocol for control of external systems and/or internal display features through programmable bezel soft keys. Multiple mounting options allow for seamless integration within any rugged system. For protected operations that require data to be secured, the PSM-RD series has a removable mSATA SSD.



Removeable  
mSATA SSD  
Option



\* Cables not included

### STANDARD FEATURES

- (20) Tactile Programmable Buttons
  - Internal and/ or External Use
- (4) RS-170 Inputs; (1) RS-170 Output
- (1) USB Connector Download Port
- PIP/POP/Quad Screen Viewing Capability
- SVGA Resolution (800x600)
- Auto Sensing NTSC/PAL
- MIL-C Connectors\*
- LED Backlight (Extreme 3000:1 Dimming Ratio)
- Anti-Reflective and Anti-Glare Treatments
- IP67/NEMA 6 Enclosure
- 8.4", 10.4", 12.1" and 15.0" TFT AM LCD

### OPTIONAL FEATURES

- 64GB or 128GB DVR Storage
- Removable mSATA SSD
- Continuous Record
- NVIS MIL-STD-3009 Class B White Compliant
- Night Vision Compatible – Monochrome Red/ Green

### DVR FEATURES

- NTSC: (up to 32 Hours Record Time (approx. 1hr/GB)
- PAL: (up to 16 Hours Record Time (approx. 1hr/2GB)
- Records 24-bit High Frame-rate Video (30 fps)
- H.264/MPEG-4 Data Compression
- USB Download Port
- Time Stamping (1/100th of a Second)
- Onscreen Playback; Snapshot
- Video Thumbnail View File Management
- FF, RW, Pause, Play, Record, Stop Bezel Buttons
- Secure Erase
- *Picture-Over-Picture (POP) Mode recording not available*

### PROGRAMMABLE BUTTON INTERFACE FEATURES

- Integrated Button Assignment/Naming Capability

### MOUNT OPTIONS

(Quoted individually)



Corner Mount



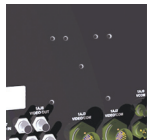
Panel Mount



RAM Mount



Side Mount



VESA Mount



LCD Size	Resolution	Nits	Viewing Angle	Contrast Ratio	Max Power Consumption
8.4" TFT AM LCD	SVGA (800x600)	800	160° (H) x 160° (V)	900:1	≤ 30 Watts
10.4" TFT AM LCD	SVGA (800x600)	800	160° (H) x 160° (V)	900:1	≤ 40 Watts
12.1" TFT AM LCD	SVGA (800x600)	550	160° (H) x 140° (V)	600:1	≤ 40 Watts
15.0" TFT AM LCD	XGA (1024x768)	800	160° (H) x 140° (V)	800:1	≤ 40 Watts

#### Digital Video Recorder (DVR) Specifications

Maximum Recording Capacity	Approximately 1hr/GB. Up to 32 hours (32GB); Up to 64 hours (64GB); Up to 128 hours (128 GB)
Video Compression	H.264/MPEG-4
Time Stamping	1/100th of a second
USB Download Port	Appears as a remote HDD when connected to a PC

#### Technical Specifications

Display	8-bit color, 16,777,216 colors
Dimming Ratio	3000:1
Video Inputs	(4) RS-170; NTSC or PAL (B, D, G, I, K)
Video Outputs	(1) RS-170
Housing	Milled Aluminum, Black Hard Anodized
Mounting	Corner, Panel, RAM, 75mm VESA Mount, Side Mount (12.1"-15.0" sizes)
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)
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-1275	Vehicle Power Requirements
MIL-STD-810	Method 505; Solar Radiation	MIL-STD-1472	Thermal Contact Hazard
MIL-STD-810	Method 506; Rain	MIL-STD-3009	NVIS Compatible (Optional)
MIL-STD-810	Method 507; Humidity	MIL-PRF-22885	Sunlight Readability for Push Buttons
MIL-STD-810	Method 508; Fungus	MIL-A-8625	Standard Finish, Type III, Class 1 & 2
MIL-STD-810	Method 509; Salt/Fog	MIL-PRF-22750	Painted Finish, Optional, Minimum Quantity Required
MIL-STD-810	Method 510; Blowing Sand and Dust	MIL-DTL-26482	Connector, Qualified
MIL-STD-810	Method 511; Explosive Atmosphere	MIL-DTL-38999	Connector, Qualified

\* Cables not included

† 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.