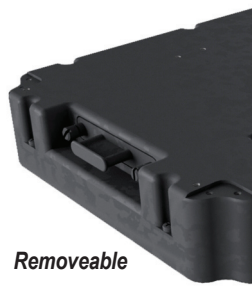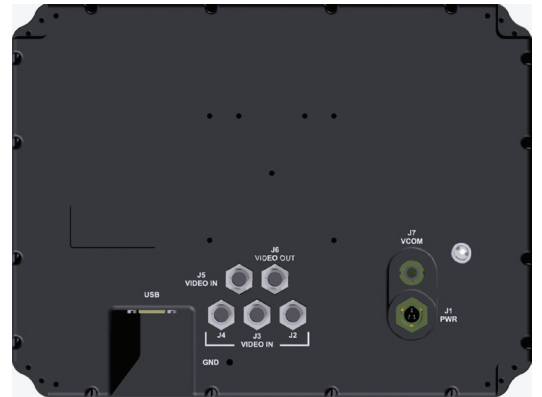DSS
technology in motion

PSM
PROGRAMMABLE SURVEILLANCE MONITOR

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

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

OPTIONAL FEATURES

- 64GB or 128GB DVR Storage
- Removable mSATA SSD
- Continuous Record
- NVIS Green/Red Compatible

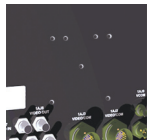## MOUNT OPTIONS *(Quoted individually)*

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 Category 14 - Aircraft; Category 20 - Ground Mobile
MIL-STD-810	Method 501, High Temperature	MIL-STD-810	Method 516, Procedure I, Functional Shock
MIL-STD-810	Method 502, 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 Compatibility (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	(and 38999) Connector, Qualified
MIL-STD-810	Method 511, Explosive Atmosphere		

*   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.

PSM SERIES(M) © 10/2017

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DSE
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