**ODYSSEE**
technology in motion

PSM

PROGRAMMABLE SURVEILLANCE MONITOR 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 RS232 or RS422 protocol) for control of external systems and/or internal display features through programmable bezel 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 SSD.

Removeable SSD Option
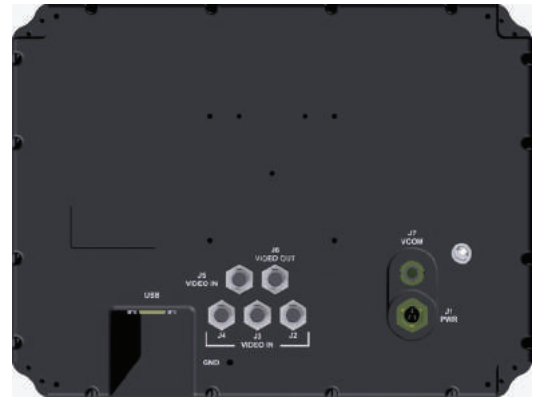
* Cables not included

STANDARD FEATURES

- Programmable Bezel Keys (20), RS232/RS422
  - Internal and/ or External Use
- Composite Video Inputs (4); Composite Video Output (1)
- Auto Sensing NTSC, PAL Formats
- USB Connector Download Port (1)
- PIP/POP/Quad Screen Viewing Capability
- SVGA Resolution (800x600)
- MIL-C Connectors*
- LED Backlight (3000:1 Dimming Ratio)
- Anti-Reflective and Anti-Glare Treatments
- IP67/NEMA 6 Enclosure (Sealed Connectors*)
- 8.4", 10.4", 12.1" and 15.0" TFT AMLCD

OPTIONAL FEATURES

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

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 KEY INTERFACE FEATURES

- Integrated Bezel Key Assignment/Naming Capability

MOUNT OPTIONS *(Quoted individually)*

Corner   **Panel**   **RAM**   **Side**   **VESA**
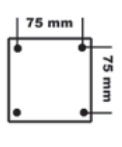
LCD SIZE	RESOLUTION	LUMINANCE	VIEWING ANGLE	CONTRAST RATIO	MAXIMUM POWER CONSUMPTION
8.4" TFT AMLCD	SVGA (800x600)	800 nits	160° (H) x 160° (V)	900:1	30 Watts
10.4" TFT AMLCD	SVGA (800x600)	800 nits	160° (H) x 160° (V)	900:1	40 Watts
12.1" TFT AMLCD	SVGA (800x600)	550 nits	160° (H) x 140° (V)	600:1	40 Watts
15.0" TFT AMLCD	XGA (1024x768)	800 nits	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. TFT AMLCD (Thin-Film Transistor Active-Matrix Liquid-Crystal Display)
Dimming Ratio	3000:1
Video Inputs	Composite Video Inputs (4); Auto Sensing NTSC and PAL-BGHID Formats
Video Outputs	Composite Video Output (1)
Housing	Milled Aluminum, Black Hard Anodized
Mount Options	Corner, Panel, RAM, VESA (75mm), Side; Quoted individually.
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.

PSM SERIES(Q)© 1/2022

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