

# μRMS-SS: MICRO REMOVABLE MEMORY SYSTEM SOLID STATE

A rugged and affordable high-capacity, high-performance, removable solid-state memory cartridge

## μRMS-SS



The μRMS-SS is a removable solid-state cartridge designed for harsh environments. The μRMS-SS provides up to 256 gigabytes of non-volatile storage allowing users to tailor μRMS-SS capacity to their affordability requirements.

The μRMS-SS is a member of the highly successful General Dynamics Removable Memory System (RMS) storage cartridge line. Over 30,000 RMS-style cartridges are in the field today.

The μRMS-SS system:

- Can be used for data exchange, a recorder media module, or as a server disk.
- Provides sustained throughput greater than 100 megabytes/sec in write and read mode which is suitable for high-performance applications.
- Provides a SATA interface. Design is capable of supporting SAS when SAS solid-state media becomes available.
- Incorporates a built-in, wear-leveling algorithm that provides life-extension of the basic flash memory technology.
- Integrates support for multiple data destruct security requirements (such as DoD NISPOM 5220.22-M, NSA/CSS 130-2, NSA/CSS 9-12, AR 380-19, NAVSO P-5239-26, AFSSI-5020, and IRIG 106-07).

The μRMS-SS is also exceptionally rugged. It is able to tolerate extreme shock, vibration, temperature, and altitude conditions due to its advanced protection and packaging. The handling problems inherent in many removable disk cartridge designs are not present with the μRMS-SS. The high reliability connectors of the μRMS maintain connectivity over 100,000 insertion/extraction cycles. The μRMS enclosure provides EMI protection and allows for spray washing and immersion.

# μRMS-SS: Removable Memory System Solid State

## Technical Specifications

### Functional Notes

<b>CAPACITY</b>	256 gigabytes*
<b>INTERFACE</b>	SATA
<b>RANDOM WRITE IOPS</b>	100
<b>RANDOM READ IOPS</b>	5,000
<b>TRANSFER RATES</b>	Up to 100 megabytes/sec
<b>POWER TYPE</b>	+5 Vdc

### Physical

<b>LENGTH (IN) [MM]</b>	6.73 [171]
<b>WIDTH (IN) [MM]</b>	4.06 [103]
<b>HEIGHT (IN) [MM]</b>	1.35 [34]
<b>WEIGHT (LBS) [KG]</b>	1.1 [0.7]**
<b>POWER (WATTS)</b>	2.1 typical
<b>MTBF (HOURS)</b>	>500,000***
<b>BIT ERROR RATE</b>	<1 in 10 <sup>12</sup>
<b>COOLING</b>	Free Convection
<b>CONNECTOR INSERTIONS AND REMOVALS</b>	Over 100,000

### Environmental\*\*\*\*

<b>TEMPERATURE (OP)</b>	-40° to +80°C
<b>TEMPERATURE (NOP)</b>	-51° to +85°C
<b>SHOCK (OP)</b>	1,500G (11ms, half-sine)
<b>VIBRATION (OP)</b>	16.4 G <sub>rms</sub> (20-2,000 Hz)
<b>ALTITUDE (FEET) [KM]</b>	-1,200 to +120,000 ft [-.36 to 36.6]
<b>LINEAR ACCELERATION (OP AND NOP)</b>	± 22.5g

\*Other capacities available upon request.

\*\*Weight is capacity dependent. Current value based on 256GB.

\*\*\*Ambient temperature 25°C, ground benign. Additional analysis upon request.

\*\*\*\*Similar to other qualified devices.

**Note:** Consult General Dynamics Advanced Information Systems regarding applications requiring performance beyond technical specifications listed.

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