



**G2**

**MICRORECORDER / MICRONAS / MICROSERVER**

**HIGH PERFORMANCE SOLUTION WITH REMOVABLE STORAGE**

**PRE-RELEASE  
DATA SHEET**

# G2

## microRecorder, microNAS and microServer

The G2 microRecorder, a robust Gigabit and 10Gb Ethernet Recorder and NAS, is engineered to withstand harsh environmental conditions without any compromise on performance or functionality. Its optimized Size, Weight and Power and Ingress protection design make it a perfect fit for small, unmanned aerial and ground systems and other applications where space and power are limited.

The G2 has high bandwidth network connectivity, through four 10GbE ports and one GbE port with full TSN support. The G2 microRecorder and microNAS configurations can write data to, and read from, the high performance NVMe based disk array at up to 2GBytes/s. Removable Data Modules up to 16TB are initially available, with capacity increases in the works. With the easy access data module, the G2 ensures quick turnaround times between missions. The removable data modules facilitate easy data transport from vehicle or aircraft to command station or lab. The recorder uses Linux EXT4 file system and supports JBOD, RAID 0 and RAID 1 modes. Data at Rest is optionally secured with dual encryption layers, HWFDE and SWFDE, to be certified to CC and CSfC.

The G2 is a powerful solution for applications requiring high-bandwidth data collection and storage in a tiny, extremely rugged enclosure.

### KEY FEATURES

- Quad 10-Gigabit Ethernet Ports
- Additional Gigabit Ethernet Port with TSN (option)
- microNAS configuration: NFS, SMB/CIFS, FTP and HTTP
- microRecorder configuration: >2GBytes/s (TBC)
- microServer configuration: Linux OS
- RAID 0 and 1 support
- GPS unit for date and time sync (option)
- 16-40V DC power
- MIL-STD-1275, MIL-STD-810, MIL-STD-461 and MIL-STD-704
- Ingress protection: ATPD-2404 and IP66/67



### APPLICATIONS

- Autonomous vehicles (UAVs, UGVs, UUVs, USVs)
- Surveillance & reconnaissance
- Flight management & cockpit systems
- Airborne data systems (servers, recorders, loaders)
- Map & navigation systems

### BENEFITS

- SWaP-C optimized (size, weight, power, cost)
- High performance & bandwidth
- Rugged design (conduction or convection cooled)
- Flexible & scalable architecture
- Ingress protection

## QUALIFICATIONS & SPECIFICATIONS

### TECHNICAL SPECIFICATIONS

<b>Processor</b>	<ul style="list-style-type: none"> <li>■ Intel® C3708 SoC, 8 core, 1.7GHz</li> <li>■ 16GB DDR4 SDRAM with ECC</li> </ul>
<b>Rear Panel Interfaces</b>	<ul style="list-style-type: none"> <li>■ 4x 10GBASE-T</li> <li>■ 1x 1000BASE-T (option)</li> <li>■ 2x USB2.0</li> <li>■ 2x RS232</li> <li>■ 1x Power</li> <li>■ 1x CANbus/RS422/RS485 (option)</li> <li>■ 1x GPS antenna input (option)</li> <li>■ Optional expansion module IO</li> <li>■ 4x NVIS compatible LEDs</li> <li>■ 1x Video output (option)</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>■ Up to 16TB Removable Data Module using NVMe SSDs</li> <li>■ RAID modes 0 and 1</li> <li>■ Exported file systems: NFS, SMB/CIFS, FTP and HTTP</li> <li>■ JBOD, RAID0 RAID1 support</li> <li>■ Internal system drive (option)</li> </ul>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>■ SMART</li> <li>■ SNMP</li> <li>■ Syslog</li> <li>■ BIT suite</li> </ul>
<b>Data Security</b>	<ul style="list-style-type: none"> <li>■ SWFDE (option) – pending CC/CSfC approval</li> <li>■ HWFDE (option) – coming soon</li> <li>■ Write protected memory (option)</li> </ul>
<b>Operating Temperature</b>	<ul style="list-style-type: none"> <li>■ 0°C to +50°C standard temperature</li> <li>■ -40°C to +71°C extended temperature</li> </ul>
<b>Shock and Vibration</b>	<ul style="list-style-type: none"> <li>■ MIL-STD-810</li> </ul>
<b>Altitude</b>	<ul style="list-style-type: none"> <li>■ -1,500 to 60,000ft*      * Contact factory for high altitude options</li> </ul>
<b>EMI/RFI</b>	<ul style="list-style-type: none"> <li>■ MIL-STD-461</li> </ul>
<b>Ingress Protection</b>	<ul style="list-style-type: none"> <li>■ IP66, IP67 (TBC)</li> <li>■ ATPD-2404 immersion and jet wash</li> </ul>
<b>Humidity</b>	<ul style="list-style-type: none"> <li>■ MIL-STD-810, 95% @ 60°C</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>■ 16-40V DC (nominal) (TBC)</li> <li>■ MIL-STD-704 and MIL-STD-1275</li> </ul>



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## QUALIFICATIONS & SPECIFICATIONS

### PRODUCT VISUAL & PROPERTIES

Length: 8 inches (204 mm) | Width: 4.17 inches (106 mm) | Height: 2.66 inches (68 mm)  
including connectors and outer RDM door



Conduction cooled and natural convection cooled | Weight (incl storage): TBC | Power: TBC  
**Mounting holes compatible with G1 mounting**

# SPECTRA

Defense Technologies

Spectra Defense Technologies is a global provider of leading C5ISR solutions for aerospace and defense customers. With over 35 years of proven performance and differentiated expertise, we deliver fully integrated mission systems, data recorders, secure networking, edge computing, robust data-at-rest encryption and advanced visualization that capture, process, and display mission-critical data across air, land, sea, and space.

Backed by engineering, sales, and production teams in North America and Europe, Spectra combines global reach with agile innovation to meet evolving end-user needs with speed and precision. Guided by a culture of innovation and deep customer partnership, we build enduring trust through open-architecture designs, technical excellence, and resilient systems designed to meet today's mission needs and anticipate tomorrow's demands for the U.S. DoW, NATO, European defense organizations, and allied partners worldwide. Visit [spectradefense.tech](https://spectradefense.tech) to learn more.

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