

# GALLEON G1 MICRORECORDER

## Removable Storage – High Performance

The Galleon G1 microRecorder is a powerful Gigabit and 10Gb Ethernet Recorder in an extremely small enclosure. It is designed to meet the most severe environmental conditions without compromising on functionality and performance. The Size, Weight and Power (SWaP) optimized design makes it ideal for use in small unmanned aerial and ground systems, as well as other space and power constrained applications.

The G1 microRecorder is capable of capturing up to four Gigabit Ethernet ports at full line rate and remove at close to 120MB/s per Ethernet port. With the optional 10GbE port, recording rates increase to greater than 800MB/s. Fitted with up to 40TB of Industrial Grade MLC storage or up to 20TB Military Grade SLC storage, the removable data modules allow very short turnaround times between missions and easy transport of data between the vehicle or aircraft and the command station or lab where the data is analyzed or distributed.

The G1 records to Linux EXT4 file system supporting JBOD, RAID 0 and RAID 1 modes. Docking stations allow instant

access to the recorded data on a laptop or workstation with a USB3 connection. With Galleon's high performance data recorder software, the unit can be configured as a video over Ethernet or general UDP or TCP/IP data recorder capable of streaming at over 800MB/s to solid-state storage.

The recorder has a simple C++ API for remote control over a separate Gigabit Ethernet connection. Optional FIPS 140-2 and AES-256 hardware encryption provides a high level of data security with flexible key management options, including physical key tokens through front panel key loading port and remote loading over a secure network connection.

The G1 microRecorder is ideal for any application where huge amounts of data must be collected and stored.

Galleon Embedded Computing's quality management system is certified to Aerospace Standard AS/EN 9100 and ISO 9001.

### LIGHTWEIGHT QUAD GB ETHERNET RECORDER



FIPS 140-2<sup>TM</sup> Inside

#### KEY FEATURES

- Quad Gigabit Ethernet ports
- Single 10GbEthernet port
- Up to 40TB SSD
- 16V-50V DC power
- Intel® CPU
- Easy to use Recorder API
- 8GB DDR3 SDRAM with ECC
- Optional AES-256 encryption
- MIL-STD-810, MIL-STD-461 and MIL-STD-704

#### APPLICATIONS

- UAS data recorder
- Multi-sensor recorder
- Flight test data recorder
- Surveillance, intelligence, reconnaissance

#### BENEFITS

- Rugged conduction cooled designs
- SWaP-C optimized
- Low power
- High bandwidth

# TECHNICAL SPECIFICATION



## Rear Panel Recording Interfaces

- 4x 1000BASE-T Gigabit Ethernet
- 1x 10GBase-T 10GbE (option)

## Storage

- Up to 40TB removable MLC SSD
- Up to 20TB removable SLC SSD
- Non-removable storage for OS installation
- Up to 256GB SLC FLASH
- File system: EXT4

## Processor

- Intel® C2758 Octal Core CPU @ 2.4GHz
- 8GB DDR3 SDRAM with ECC\*

## Data Security

- HWFDE using XTS-AES 256bit (option)
- Certified FIPS 140-2 encryption inside (AES-256)
- SWFDE using XTS-AES 256bit (option)
- Write protected memory (option)

## I/O Expansion

- MiniPCI Express expansion site

## Interfaces

- 4x Gigabit Ethernet
- 1x 10GbEthernet (option)
- 1x VGA
- 2x USB 2.0
- 2x RS232
- 1x Power
- 1x GPS antenna input (option)

## Operating Temperature

- 0°C to +50°C standard temperature
- -40°C to +75°C extended temperature

## Shock and Vibration

- Tested to MIL-STD-810

## Altitude

- -1500 to 60 000 ft\*\*

## EMI/RFI

- Tested to MIL-STD-461

## Humidity

- Up to 100%, condensing

## Size, Weight & Power

- Ultra-Small Form Factor: 83 x 63 x 185 mm
- Conduction cooled and natural convection cooled
- Weight: < 1.5 kg
- Power: 20W-35W (configuration dependent)

## Power Supply

- 16-50V DC (nominal)
- Tested to MIL-STD-704

\* Contact factory for other memory options (MOQ conditions apply)

\*\* Contact factory for high altitude options

## ABOUT GALLEON

Galleon Embedded Computing is an innovative leader in development of high-performance, high-quality storage solutions and small rugged data recorder systems, servers and NAS devices.

Galleon's offerings span from commercial grade products for benign environments to ruggedized conduction-cooled products for deployed systems in severe environments.

## RELATED PRODUCTS

- CP50 Control Panel
- XSR Ethernet Recorders
- Offload Systems
- G1 Removable Data Module



## Galleon Embedded Computing

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