

# 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, at close to 120MB/s per Ethernet port. With the optional 10GbE port, recording rates increase - achieving over 800MB/s. Fitted with up to 40TB of Industrial Grade MLC storage or up to 20TB Military Grade SLC storage, the removable data cartridges 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 analysed or distributed.

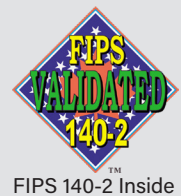
The unit records to Linux EXT4 file system supporting JBOD, RAID 0 and RAID 1 modes. Docking stations allow instant access to the recorded data on any laptop or workstation with a USB3 connection. With Galleon's high performance data recorder software, the unit can be configured as a video over Ethernet or general UDP data recorder capable of streaming at over 800Mbytes/sec to solid-state storage.

The G1 microRecorder provides multiple options for data security, including Hardware full disk encryption for the most challenging security requirements, and self-encrypted SSDs with secure erase algorithms.

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.

### Quad Gb Ethernet Recorder at less than 1.5 kg Now with 10GbEthernet and hardware encryption!



#### KEY FEATURES

- Quad Gigabit Ethernet ports
- Single 10GbEthernet port
- Up to 40TB of removable solid-state storage
- 12V-48V DC power
- Intel® microServer-C2758 high performance octal core CPU
- Easy to use Recorder API
- 8GB DDR3 SDRAM with ECC
- Optional AES-256 encryption
- Rugged air- and conduction cooled designs
- Tested to MIL-STD-810, MIL-STD-461 and MIL-STD-704

#### APPLICATIONS

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

#### BENEFITS

- Optimized for SWaP-C
- Ultra lightweight
- Low power
- High performance
- High bandwidth

# TECHNICAL SPECIFICATION



## Rear Panel Recording Interfaces

- 4x 100BASE-T Gigabit Ethernet
- 1x 10GBASE-T 10GbEthernet (option)

## Storage

- Removable storage unit
  - Up to 40TB removable MLC FLASH
  - Up to 20TB removable SLC FLASH
- 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 +71/75°C extended temperature (AC/CC)

## Shock and Vibration

- Tested to MIL-STD-810

## EMI/RFI

- Tested to MIL-STD-461

## Altitude

- -1500 to 40 000 ft (AC)\*\*

## Humidity

- Up to 100%, condensing

## Size, Weight & Power

- Ultra-Small Form Factor:
  - 83 x 63 x 185mm/3.2 x 2.5 x 7.2"
- Conduction cooled and natural convection cooled
- Weight: < 1.5 kg
- Power: 10W-35W (configuration dependent)

## Power Supply

- 12V-48V 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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