

GALLEON XSR 10 GbE RECORDER

Rugged – Small – High Performance

The Galleon XSR-10GbE data recorder offers superior performance in a small form factor, and it is capable of capturing UDP or TCP/IP data from up to eight 10Gb Ethernet interfaces and/or up to thirteen Gigabit Ethernet interfaces at over 1GB/s sustained recording speeds.

The extremely rugged and Size, Weight, Power and Cost (SWaP-C) optimized design makes it ideal for deployed applications in manned and unmanned aerial systems, test pods, flight test, ground vehicles, etc. Removable storage enables very short ground times for airborne applications and instant access to recorded data in the ground access system without the need to download the recorded data over a slow data drain interface.

Industry standard SSDs are used to benefit from the ever increasing storage densities and cost reductions as the

technology evolves. Currently up to 80TB of solid-state storage is offered per removable data cartridge, sufficient for up to 3 hours recording at 1GB/s.

The recorder has a simple C++ API for remote control over a separate Gigabit Ethernet connection. Optional 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 XSR 10Gb Ethernet data recorder is designed to meet the most severe environmental conditions without compromising on functionality and performance.

Galleon Embedded Computing's quality management system is certified to Aerospace Standard AS/EN 9100:2016 and ISO 9001:2015.

THE WORLD'S SMALLEST 10GB ETHERNET RECORDER



KEY FEATURES

- Small: 153 x 175 x 103mm (conduction cooled)
- Up to 8 Intel® 10GbE ports
- Up to 5 Intel® GbE ports
- Up to 80TB removable SSD
- On-board GPS for time and date synchronization
- Optional AES-256 bit hardware encryption
- Wide input 16-40V DC power
- Rugged conduction- and air cooled design
- MIL-STD-810
- MIL-STD-461

APPLICATIONS

- UAS, UGV
- High speed sensor recording
- HD video recording
- Sensor development
- Flight test

BENEFITS

- SWaP-C
- High bandwidth
- High storage density
- Flexible and scalable
- Rugged design

TECHNICAL SPECIFICATION



Network

- Up to 8 Intel® 10 GbE Controllers
- Up to 5 Intel® GbE Controllers
- Dedicated Intel® GbE Controller for control interface

Storage

- Up to 40TB removable MLC FLASH
- Up to 4TB removable SLC FLASH
- AES 256-bit hardware encryption (optional)

Front Panel Interfaces

- Removable storage bay

GPS

- On-board GPS unit
- Time and date synchronization through GPS or NTP service

Rear Panel Interfaces

- 8x optical 10 GbE
- 13x 1000BASE-T GbE
- 3x USB 2.0
- 2x RS-232
- 1x GPS antenna input
- 1x Power, 16-40V DC wide input

Operating Temperature

- 0°C to +50°C standard temperature
- -20°C to +65°C extended 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)*
- -1500 to 60 000 ft (CC)*

Humidity

- Up to 100%, condensing

Size, Weight & Power

- 157 x 201 x 103 mm (6.2 x 7.9 x 4.1")**
- 194 x 341 x 89 mm (7.6 x 13.4 x 3.5")***
- Rugged small form factor, half rack or ARINC 404a versions available in conduction cooled, forced air cooled and fan-less natural convection cooled variants
- Weight: from 9.9 lb (min. configuration)
- Power, idle: 40-60W (configuration dependent)
- Power, max: 50-90W (configuration dependent)

Power Supply

- 16-40V DC wide input

*Contact factory for high altitude options
**4 channel, conduction cooled, small form factor
***8 channel, conduction cooled, half rack

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
- Offload Systems
- XSR-RDM Data Cartridges
- Titan 10GbE XMC
- Galleon Extended Warranty and Support



Galleon Embedded Computing
Katy, TX, USA: +1-281-769-8211
www.galleonec.com
us_sales@galleonec.com