

# GALLEON XSR GBE RECORDER Rugged – Small – High Performance

The Galleon XSR Rugged Gigabit Ethernet Recorder offers superior performance in a small form factor and is capable of capturing data from up to 13 separate Gigabit Ethernet interfaces. Each Gigabit Ethernet interface can be recorded at full speed storing UDP or TCP payload data.

The design concept of XSR is based on the use of COTS Open Architecture modules. This enables the XSR to keep pace with increasing technology advancement and provides a key mitigation strategy for Obsolescence Management, which helps to protect the user's design for 10 years or more.

Intel Core i7 and Xeon processor options, including the latest 9th generation, are supported with up to 96GB SDRAM supporting ECC.

The XSR is optimized for deployed applications such as unmanned systems, pods and ground vehicles. Rugged miniature 38999 connectors for all interfaces ensure reliable operation in all conditions. The design is Size, Weight, Power and Cost (SWaP-C) optimized.

Removable Data Modules (XSR RDMs) enables 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 drain interface. Industry standard solid-state drives are used to benefit from the ever-increasing storage densities and cost reductions as the technology evolves.

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

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

# GIGABIT ETHERNET RECORDER







NIAP-Approved Dual-Layer Software Full Disk Encryption (SWFDE) & Hardware Full Disk Encryption (HWFDE)

# **KEY FEATURES**

- Small: 156 x 175 x 103 mm (conduction cooled)
- Up to 13x Intel® GbE Controllers
- Up to 80TB removable SSD
- Optional FIPS 140-2 and AES-256 encryption
- GPS unit for time/date synchronization
- XMC Site for flexible I/O Expansion
- MIL-STD-810, MIL-STD-461

# **APPLICATIONS**

- UAVs, UGVs, UUVs
- High speed sensor recording
- Surveillance
- HD video recording
- Sensor development

## **BENEFITS**

- SWaP-C
- High bandwidth
- High storage density
- Flexible and scalable
- Rugged conduction- or air-cooled designs

TM: A Certification Mark of NIST, which does not imply product endorsement by NIST, the U.S. or Canadian Governments All trademarks are property of their respective owners. All data subject to change without notice. Version: August 2022

## TECHNICAL SPECIFICATION







NIAP-Approved Dual-Layer Software Full Disk Encryption (SWFDE) & Hardware Full Disk Encryption (HWFDE)

## Network

 Up to 13 Intel® GbE Controllers for high-speed data acquisition

#### Storage

- Up to 40TB SLC SSD
- Up to 80TB MLC SSD
- Optional Certified FIPS 140-2 hardware encryption (AES-256)
- Optional AES-256 encryption

## **Rear Panel Interfaces**

- Up to 13x Gigabit Ethernet
- 1x Power
- 1x GPS antenna input
- Maintenance port

# **Front Panel Interfaces**

Removable storage bay

#### **GPS**

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

## **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

# Altitude

- -1500 to 40 000 ft (AC)\*
- -1500 to 60 000 ft (CC)\*

## EMI/RFI

Tested to MIL-STD-461

## **Humidity**

• Up to 100%, condensing

## Size, Weight & Power

- 57 x 201 x 103 mm\*\*
- 194 x 341 x 89 mm\*\*\*
- Weight: 4 kg (minimum configuration)
- Power, idle: 45W
- Power, max load: 65W

#### **Power Supply**

- 16-40V DC wide Input
- \* Contact factory for high altitude options
- \*\* 9 channel, conduction cooled, small form factor
- \*\*\* 13 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
- Titan GbE XMC



