

GALLEON XSR 10GBE RECORDER

Rugged – Small Size – 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 8x 10Gb Ethernet interfaces at 1.8GB/s sustained recording speeds.

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

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.

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 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 XSR 10Gb Ethernet 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 and ISO 9001.

THE WORLD'S SMALLEST 10GBE RECORDER*



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

KEY FEATURES

- Small: 153 x 175 x 103 mm (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 FIPS 140-2 and AES-256 encryption
- Rugged conduction- and air-cooled designs
- MIL-STD-810, MIL-STD-461

APPLICATIONS

- UAS, UGV, UAV
- 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



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

Network

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

Storage

- Up to 80TB removable MLC SSD
- Up to 40TB removable SLC SSD
- Optional certified FIPS 140-2 hardware encryption (AES-256)
- Optional AES256 encryption

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 10GbE
- 5x 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
- -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

- 157 x 201 x 103 mm***
- 194 x 341 x 89 mm****
- Weight: from 4.5 kg (min. configuration)
- Power, idle: 40-60W (configuration dependent)
- Power, max: 50-90W (configuration dependent)

Power Supply

- 16-40V DC wide input

* With the exception of our own even smaller G1 microRecorder

** 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
- Titan 10GbE XMC

