

GALLEON XSR SFPDP RECORDER

Up to 8 Channels – Extremely Rugged

The Galleon XSR Rugged sFPDP Recorder offers superior performance in an ultra-small form factor and is capable of capturing up to 8 Serial FPDP channels at link speeds up to 4.25Gbaud. Additional Ethernet interfaces (1GBE and 10GBE provide additional sideband recording options)

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 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 sFPDP 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.

SERIAL FPDP RECORDER



FIPS 140-2 Inside

KEY FEATURES

- Up to 8 channel Serial FPDP
- VITA 171 compliant
- 1.0625, 2.125, 2.5, 3.125 and 4.25 Gbaud supported
- Rugged MIL-DTL-38999 expanded beam optical connectors
- Up to 80TB removable SSD
- Up to 2Gbytes/sec recording bandwidth
- Optional FIPS 140-2 and AES-256 encryption
- GPS unit for date and time synchronization

APPLICATIONS

- Missile testing
- Radar development and data recording
- High speed sensor data capture
- Geological survey and seismic
- Physics research

BENEFITS

- SWaP-C optimized
- High performance
- Flexible and scalable
- Rugged design

TECHNICAL SPECIFICATION



Serial FPDP

- Up to 8 channels
- 1.0625, 2.125, 2.5, 3.125 and 4.25 Gbaud link speed supported
- Vita 171 compliant
- MIL-38999 expanded beam optical interfaces

Storage

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

Rear Panel Interfaces

- Up to 8x optical serial FPDP
- 5x GbE*
- 2x 10GbE (10GBase-T) - Optional
- 1x VGA
- Up to 3 USB
- 4x GPIO

Front Panel Interfaces

- Removable storage bay

Time Synchronization

- Time/date synchronization with GPS or NTP
- On-board GPS unit

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: 4.5 kg (min. configuration)
- Power, recording 4Ch sFPDP: 65W (typical)

Power Supply

- 16-40V DC wide input

* Only 3 GbE if 10GbE option used
** Contact factory for high altitude options

*** 4 channel, conduction cooled, small form factor (SFF) system

**** 8 channel, conduction cooled, half rack (HR) system

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 sFPDP XMC



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