

# GALLEON XSR RUGGED SERVER

## Removable Storage – High Performance

The XSR Server is a high-performance system for the most demanding deployed applications. It is designed to meet the most severe environmental conditions without compromising on functionality and performance. The high performance allows server virtualization in size constrained applications. The Size, Weight and Power (SWaP) optimized design makes it ideal for use in small unmanned aerial and ground systems, as well as large manned aircraft and vehicles.

Intel Core i7 and Xeon processor options, including the latest 6th generation, are supported with up to 32GB DDR4 SDRAM supporting ECC. The flexible I/O architecture allows easy integration with existing infrastructure. Up to eight 10Gigabit Ethernet ports or thirteen Gigabit Ethernet ports are supported, which lends the unit ideal for network-attached storage (NAS) applications. The high number of Ethernet ports can eliminate the need for external switches, but the system can also be supplied with an 8-port internal Gigabit Ethernet switch.

The server offers secure removable storage incorpo-

rating AES 256-bit encryption in hardware. A flexible key management system allows for key distribution over secure Ethernet links or direct attached tokens. The entire device can run in encrypted mode, including the system boot media and removable storage unit.

The removable storage subsystem offers up to 80TB of Industrial grade MLC storage or 40TB Military grade SLC storage. RAID modes 0, 1 and 5 are supported. Docking stations and 19" rack-mount servers allow for easy data exchange between the deployed servers and the ground infrastructure. The removable data cartridges allows easy transport of data between the vehicle or aircraft and the command station or lab where the data is used.

The servers can be configured with most standard operating systems, including RedHat Enterprise Linux, Debian or Windows Server.

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

### POWERFUL RUGGED SERVER WITH I7 OR XEON E3 CPU



#### KEY FEATURES

- Intel Core-i7 and Xeon CPU options
- Up to 32GB DDR4 SDRAM with ECC
- Up to 8 10GbE ports
- Up to 13 GbE ports
- Up to 8 sFPDP channels
- Up to 80TB of removable SSS
- Optional hardware AES-256 encryption
- Wide input 16-40V DC power
- Embedded GPS for high resolution time server
- XMC/PMC sites for flexible I/O Expansions, Serial FPDP, MIL-STD-1553, HD video etc.
- Rugged conduction and air cooled designs
- MIL-STD-810, MIL-STD-461, MIL-STD-704

#### APPLICATIONS

- Mission data server
- Application server
- Data recorder
- NAS

#### BENEFITS

- Optimized for SWaP
- High performance
- High bandwidth
- Flexible and scalable

# TECHNICAL SPECIFICATION



## Processor

- Intel® Core™-i7, Quad Core
- Intel® Xeon® E3, Quad Core
- Up to 32GB DDR4 SDRAM with ECC

## Network

- Up to 13 GbE Controllers
- Up to 8 10GbE Controllers
- Up to 8 sFPDP channels
- Optional 8-port Gigabit Ethernet switch

## Storage

- 1 x SLC FLASH OS system disk (up to 256GB)
- Removable storage unit
  - Up to 80TB removable MLC FLASH
  - Up to 40TB removable SLC FLASH

## I/O Expansion

- Dual XMC/PMC with x8 PCI Express interface
- MiniPCI Express expansion site

## Rear Panel Interfaces

- 5x 1000BASE-T GbE
- 8x 1000BASE-T GbE (optional)
- 8x 10Gbe (optional)
- 1 x HDMI (optional)
- 1x VGA
- 3x USB 2.0
- 2x RS232/422
- 1x Power
- 1x GPS antenna

## Operating Temperature

- 0°C to +50°C standard temperature
- -20°C to +65°C extended temperature
- -40°C to +71/75°C extended temperature

## 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

- Available as small form factor, half rack and ARINC 404a in conduction cooled, forced air cooled and fanless natural convection cooled
- Weight: 4.5kg to 7.5kg (configuration dependent)

## Power Supply

- 16-40V DC wide input
- Tested to MIL-STD-704

\*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

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



## Galleon Embedded Computing

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