

GALLEON XSR HD VIDEO RECORDER

Rugged – Small Size – High Performance

The XSR HD Video Recorder supports up to 8 HD video channels at 1080p60 resolution, as well as up to eight composite video inputs. Channels can be individually configured to record compressed and/or uncompressed video at full resolution. Input channels can be monitored live over Ethernet while recording. Simultaneous playback and recording are supported for all channels. Low latency bypass is also available per channel.

The design concept of XSR is based on the use of COTS Open Architecture modules that allow the unit to make use of the latest generation Intel processors. This enables the XSR to keep pace with increasing technological advancement and provides a key mitigation strategy to protect the user’s design for 10 years or more. The extremely rugged design makes it ideal for deployed applications in rugged or harsh environments.

Removable storage enables instant access to recorded data in a standard PC with a simple USB 3.0 connected docking station without the need to download the

recorded data over a slow data drain interface. Industry standard solid-state drives are used to benefit from the ever increasing storage densities and cost reductions as the technology evolves. No data conversion is necessary, the video files can be played direct by a standard player like Windows media player or VLC. Currently up to 80TB of solid-state storage is offered per removable data module, sufficient for very long mission duration even when recording uncompressed HD video.

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.

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

POWERFUL HD VIDEO RECORDING AND PROCESSING



FIPS 140-2 Inside

KEY FEATURES

- Up to 8 full HD video channels
- Uncompressed or H.265/H.264 compression
- Up to 80TB removable SSD
- Simultaneous recording and streaming of live video feed
- Wide input 16-40V DC power
- On-board GPS for time synchronization
- Optional AES 256-bit hardware encryption
- MIL-STD-810, MIL-STD-461, DO-160

APPLICATIONS

- Surveillance
- Intelligence
- Reconnaissance
- SAR
- Unmanned systems
- Flight test

BENEFITS

- Optimized SWaP-C
- High bandwidth
- High storage density
- Flexible and scalable
- Rugged conduction-cooled and air-cooled designs
- COTS Open Architecture

TECHNICAL SPECIFICATION



Audio Video I/O

- Up to 8x HD video (3G-SDI, HD-SDI)
- Up to 8x SD video (SD-SDI, composite, RS-170, etc.)
- Up to 8x audio inputs

Processor

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

Other I/O

- 5x 1000BASE-T Ethernet
- 2x 10GBase-T Ethernet (optional)
- 1x power, 16-40V DC
- 3x USB 2.0
- 2x RS232
- 1x GPS antenna input

Data Security options

- Certified FIPS 140-2 hardware encryption (AES-256)
- Self Encrypted SSDs (AES-256)
- Secure Erase

Storage

- Up to 80TB removable data module

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 Small Form Factor
- 194 x 341 x 89 mm Half Rack
- Weight: from 4.5 kg (min. configuration)
- Power (idle): 40-60W (configuration dependent)
- Power (max): 50-125W (configuration dependent)

Power Supply

- 16-40V DC (nominal)
- Tested to MIL-STD-704

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 1/10/25/40Gb Ethernet XMCs



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