

Galleon 10Gb Ethernet Recorder

Rugged - Ultra Small - High Performance

KEY FEATURES

- Ultra small: 150 x 170 x 100 mm
- Intel® 82599ES Dual 10Gigabit Ethernet Controller for high speed data acquisition
- Up to 1.6TB (SLC) or 4TB (MLC) Removable Solid State Storage
- Up to 16TB (SLC) / 40TB (MLC) Removable Solid State Storage Expansion
- Onboard GPS for high resolution timestamping of recorded data
- XMC/PMC Sites for flexible I/O Expansion (analog, sFPDP, 1553, HD video, custom, etc)
- Wide Input 9-36V DC Power (48V optional)
- Rugged Conduction Cooled and Fanless Air Cooled Design
- MIL-STD-810F

APPLICATIONS

- UAVs, UGVs
- Surveillance
- HD Video Recording
- Sensor Development

BENEFITS

- Optimized for Size, Weight and Power (SWaP)
- High Bandwidth
- High Storage Density
- Flexible and Scalable
- Rugged design



The World's Smallest 10Gb Ethernet Recorder!

The XSR-10GE is a very compact, high performance ready to run Gigabit Ethernet Recorder. Key features include:

- Ultra small: External dimensions only 150 x 170 x 100mm
- Intel® 82599SE Dual 10 Gigabit Ethernet Controller
- High performance Intel® Core™-i7 Gen2 Quad Core CPU
- 1.6TB (SLC) / 4TB (MLC) Solid State Storage in field exchangeable modules
- Rugged Conduction Cooled Design

The XSR Rugged 10 Gigabit Ethernet Data Recorder is designed to meet the most severe environmental conditions without compromising on functionality and performance. Its SWaP optimized design makes it ideal for use in small Unmanned Aerial and Ground Vehicles, Surveillance, High Definition Video Applications, etc.



galleon
embedded computing

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XSR-10GE In a Nutshell

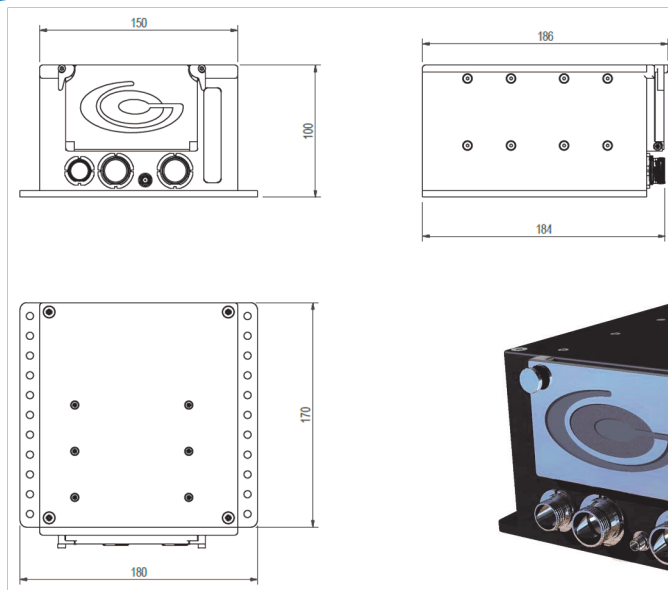
The XSR-10GE family of rugged data recorders represents a breakthrough in ultra small, high performance data recording. 1.6TB removable solid state SLC Flash storage in a 150 x 170 x 100 mm conduction cooled unit is unmatched in the industry.

For ultimate performance, the XSR-10GE utilizes the new second generation Intel® Core™-i7 Quad Core processors running at 2.1GHz. Up to 16GB DDR3 SDRAM is supported.

Although designed to be a ready to run COTS 10Gigabit Ethernet Data Recorder, the XSR-10GE is extremely flexible and expandable. The unit supports up to 16TB SLC Flash or 40TB MLC Flash Storage in removable expansion modules.

In addition to the two 10Gb optical connections, up to three Gigabit Ethernet connections are available on Glenair MightyMouse connectors in the front panel.

The onboard GPS unit provides accurate timing information for timestamping of recorded mission data.



Technical Specification

Network

- Intel® 82599ES Dual 10Gigabit Ethernet Controller and
- 2x Intel® 82574 Gigabit Ethernet Controllers for high speed Ethernet Recording
- Dedicated Intel® 82574 Gigabit Ethernet Controller for Control Interface

Processor

- Intel® Core™-i7 Quad Core, 2.1GHz.
- Up to 16GB DDR3 SDRAM

Storage

- 1x Solid State System Disk (up to 256GB)
- 4x 2.5" Solid State Disks in Removable Unit supporting 9.5mm disks
 - Up to 1.6TB removable SLC FLASH
 - Up to 4TB removable MLC FLASH

Timestamping

- High precision GPS Position and Timing Data
- 10MHz Reference Clock
- 1pps Sync Pulse
- RF Interface to External Antenna

Front Panel Interfaces

- 2x SFP+ Optical 10Gb Ethernet
- 3x 1000base-T Gigabit Ethernet
- 1x Power
- 1x GPS Antenna

I/O Expansion

- One MiniPCI Express Expansion Site (supporting x1 PCI Express and USB 2.0)

Operating Temperature

- 0°C to +50°C Standard temperature (AC/CC)
- -40°C to +85°C Extended temperature (CC)
- -55°C to +85°C Storage temperature

Shock & Vibration

- MIL-STD-810 compliant

Altitude

- Altitude: -1500 to 40 000* ft

EMI/RFI

- MIL-STD-461F compliant

Humidity

- Up to 95%

Size, Weight & Power

- Size: 150 x 170 x 100mm (5.9 x 6.7 x 3.9") (CC base unit not including mounting plate and connectors)
- Weight: 4.0kg (Minimum configuration)
- Power (idle): 30W
- Power (max load): 50W

Power Supply

- 12/24/28V DC (9-36V DC Wide Input)
- 48V DC (36-75V DC Wide Input)

* Contact factory for high altitude options.



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