





High Speed Ruggedized (All-In-One) Commercial and Military Rugged Storage/Server Appliance

Currently deployed on the U.S. Military Ground, Aircraft and Ships

Key Features

- •4U commercial and rugged versions (Rugged tested to full MIL-SPEC)
- •4 front removable canisters for easy swap.
- •Supports 6 front removable HDD or SSD 2.5" drive carriers.
- •3 front hot swap power supplies
- •Interchangeable powers supplies between ground AC or Aircraft DC power supplies.
- •Supplies high-density PCle NVMe flash, up to 256TB RAW * as larger drives are released we will support higher capacities.
- Supports up to 8 million IOPS
- •Provides up to 40 GB/second throughput
- •Supports four 100Gb/s EDR InfinlBand, 100Gb/s
- Ethernet interfaces
- Supports iSCSI, FC and SRP protocols
- •IPMI system management
- Supports SanDisk ION Accelerator software
- •Dual Haswell motherboard with:

Two E5-2680v3 12-core, 2.5GHz

Embedded CPUs 1TB DDR4-2133 memory (512GB per CPU), 2 Mellanox InfiniBand cards

High-Speed Data Transfer in Rugged Computing Applications

- Data Mining
- Multi-Sensor
- · Seismic Data Processing
- Content Caching
- 3D Animation
- CAD/CAM
- intelligence, Surveillance, and Reconnaissance (ISR) applications
- High Speed Video Ingestion

Introducing World Class HSR Storage/Server Appliance

The CRS-HSR-4UC and the field deployable ready CRS-HSR-4UR

The CRS-HSR-4UC and the field deployable ready CRS-HSR-4UR provides a new level of performance for applications such as real-time HP, analytics, big data and high-speed data recording. The CRS-HSR-4 is used in the datacenter for accelerating high-performance databases, Hadoop clusters and HPC applications with large data sets. The CRS-HSR-4UR rugged version is deployed in broadcast trucks, ground stations and Surveillance, and Reconnaissance (ISR) applications the fastest, most flexible and powerful turnkey storage solution to date. The CSR-4U family provides a quantum leap in performance and application flexibility. It uses the highest performance PCle NVMe flash with PCle 3.0 x8 lanes for double the bandwidth of 2.5" NVMe. In addition, it includes features such as hot swap and front loading. The CRS-HSR provides the extreme performance demanded by today's mission-critical applications. Manned vehicles and aircraft as well as ships bring information to the battlefield much faster with CRS-HSR technology than was available previously. Mounted on long-endurance aircraft platforms, with an array of sensor technologies can deliver the persistent surveillance necessary to find and fix an elusive, insurgent enemy. Information can be sent to who wants to see it, and how they want to see it, directly to the offices of government officials or to the foot soldier in theater.







SPECIFICATIONS:

Dimensions 7"H x 17"W (19" rackmount) x 24"D

Form Factor 4U rack mount

Usable Capacity* Up to 256TB PCle NVMe flash Ancillary Drives Up to 6 x 2.5" SATA HDDs or SSDs (front

removable drives)

Chassis Ruggedized Aluminum (Mil-spec) Steel (Commercial)

Power 3 Front hot swap Power Supply N+ 1 hot-swap power system. Interchangeable powers

supplies between ground AC or Aircraft DC power supplies.

Environmental Temperature Operating: 10°C to 35°C Storage (non-operating): -20°C to 60°C System Monitoring IPMI

system monitoring capabilities

Environmental Humidity Operating: 10% to 90% non-condensing Storage (non-operating): 5% to 95%

non-condensing

Shock The CRS-HSR-4 shall be capable of continuous full performance after non-operational

(power off) exposure to mechanical shock of ± 1 Og, 11 msec, half-sine pulse, 3 shocks per axis each direction (a total of 18 shock pulses) (Lifetime exposure). Vibration

Operational: .00004-.01 g2/Hz Non-Operational: .00015-.06 g2/Hz

MIL-STD MIL-HDBK-5400, MIL-STD-461, MIL-STD-704E, MIL-STD-810F, MIL-STD-130,

MIL -A-8625F, MIL- STD-7179, MIL-STD-889B

| Commercial Unit | | | | |
|--------------------|--------------------|---------------------|---------------------|--|
| OTB (0 cards) | 25 TB (4 cards) | 100TB (16 cards) | 200TB (32 cards) | |
| 68 lbs | 70 lbs | 78 lbs | 88 lbs | |
| Full MIL-SPEC Unit | | | | |
| OTB (0 cards) | 25 TB (4 cards) | 100TB (16 cards) | 200TB (32 cards) | |
| 72 lbs | 74 lbs | 82 lbs | 90 lbs | |

| 1 Canister break down | | | | |
|-----------------------|-----------|-----------------|----------------|--|
| OTB (0 | 6.4 TB (1 | | | |
| cards) | cards) | 25 TB (4 cards) | 50TB (8 cards) | |
| 1.8lbs | 2.3lbs | 3.8lbs | 5.9lbs | |







^{*} As newer larger PCIe drives capacities become available to the market we will support larger drives.