

# StoreBox Compact 10GbE Recorder (Preliminary)

## SB1C6-E10 Ultra Compact Conduction Cooled 10GbE Recorder

### StoreBox 10GbE Recorder/NAS

The SB1C6-E10 10GbE Recorder consists of an ultra-compact conduction cooled chassis that hosts up to 30TB of hot swappable solid state recording media. Recorder I/O includes dual 10Gb Ethernet optical or copper recording interfaces, as well as dual 1Gb Ethernet control/management interfaces.

The recorder uses Critical I/O's StoreEngine and StorePak boards and flexible recording software functionality to provide a dual port *full line rate* 10GbE data recording capability. The recorder provides a capability to record multiple streams of data directly from multiple 10GbE connected data sources at aggregate rates of up to 2.5 GB/s. StorePak modules can be seamlessly added to increase storage capacity. The six slot chassis accommodates a StoreEngine module and from one to five StorePak modules.

The time-stamped recorded data may be played back to multiple 10GbE connected data destinations, or alternatively, recorded data may be accessed via 1 or 10 Gb Ethernet connections using standard file access protocols such as NFS.

### Compact, High Density, Configurable

The SB1C6-E10 provides up to 30 TeraBytes (30TB) of solid state storage in a compact conduction cooled chassis. Configurations are available which feature various storage capacities, performance capabilities, and I/O interface options.

### Scalable Recorder Storage Capacity

StoreBox capacity and performance can be easily scaled in the field by populating empty slots with additional StorePaks.

### Hot Swap & Hot Plug

The recorder allows the user to "hot-plug" and "hot-swap" StorePak storage without the need to power-down the recorder. This is ideal for applications where it is not feasible or desired to power down the system in order to remove/replace the StorePak SSD storage modules. Individual StorePak modules can be hot swapped while actively recording to other StorePaks.

### Optional 10GbE NAS Operation

In addition to 10GbE data recording/playback, the SB1C6-E10 provides an optional high performance fully managed dual port 10GbE NAS file server capability. NAS file server operation may be used concurrently with 10GbE recording.

### Recording Control

Recording operations may be controlled via the built-in recorder web management pages, or via the Recorder Network Control Protocol using a 1/10 Gb Ethernet control interface.



### SB1C6-E10 Features:

- Rugged compact conduction cooled design
- Small SWaP (size, weight and power) footprint
- Compact: 8"H x 6"W x 9"D, 28 lbs.
- Low power - 180W (with five StorePaks)
- High capacity – up to 30 TB
- Optional AES-256 hardware based encryption
- Two channels of 10GbE UDP/TCP Recording
- High performance recording – up to 2.5 GByte/s
- Time-stamping of recorded data
- Controlled rate playback of recorded data
- NAS (NFS/FTP/CIFS) access to recorded data
- Dual 10GbE optical or copper interfaces
- 1GbE management/control interface
- Removable StorePak solid state storage modules
- Scalable & expandable (by adding StorePaks)
- Quick-access door for tool-less StorePak removal
- StorePak modules rated for 100,000 insertion cycles

### SB1C6-E10 Applications:

- UAV platforms
- Surveillance platforms
- Signal Intelligence
- Communication Intelligence
- Radar, Sonar, EW



*The SB1C6-E10 10GbE recorder utilizes up to five ultra-dense StorePak hot-swappable SSD storage modules*

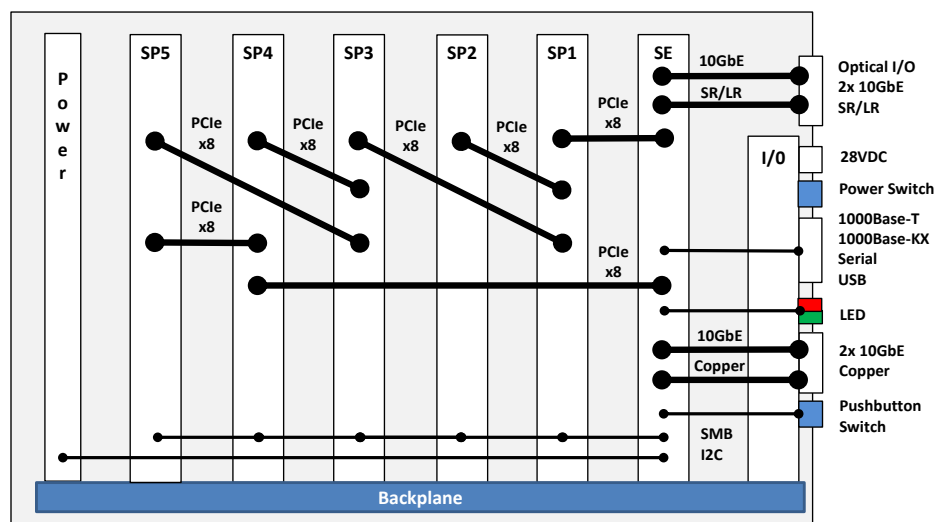
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## SB1C6-E10 Ultra Compact Conduction Cooled 10GbE Recorder

### Preliminary Technical Specifications

10GbE Data Interfaces	2x 10Gb Ethernet 10GBase-SR optical <b>or</b> 2x 10Gb Ethernet 10GBase-CX4 copper For 10GBase-LR optical or 10GBase-T copper contact Critical I/O
Control/Maintenance Interfaces	1x 1GbE 1000Base-T, 1x 1GbE 1000Base-KX, 1x USB2, 1x serial
Storage Capacity	Up to 30TB removable SSD storage (MLC media, with three StorePaks)
Recording Performance	Up to 2.5 GB/s sustained (with 2 or more StorePaks)
Recording Protocols	TCP, UDP, UDP Direct stream
Recording Control	Web based management interface or Recorder Network Control Protocol
NAS Performance	Up to 1.0 GB/s NFS
NAS Protocols	NFS, FTP, CIFS/SMB
Size	8" H x 6" W x 9" D (6 slots, accommodates StoreEngine and up to 5 StorePaks)
Weight	28 lbs. (with 5 StorePaks)
Input Voltage	18 to 38 VDC (other voltages also available. Contact Critical I/O)
Power (typical)	180W (with 5 StorePaks)
Operating Temperature	-40 to +71C measured at thermal interface (optional commercial temp 0 to +45C)
Storage Temperature	-40C to +85C
Humidity	0 to 95% non-condensing
Shock	TBD
Vibration	TBD
EMI	MIL-STD-461E
Base Model Number	SB1C6-E102 <i>w-xyzzz</i> - Six slot 3u Conduction Cooled 10GbE Recorder <i>w</i> : interface type (F = 10GBase-LR optical, C = 10GBase-CX4 copper) <i>x</i> : StorePak qty (1 to 5) <i>y</i> : StorePak flash media type (M = MLC, T = TLC, E = EMLC, S = SLC) <i>zzz</i> : total storage capacity (TB) Models with 2, 3, 4, or 8 slots are also available. Contact Critical I/O



*The SB1C6-E10 recorder architecture combines StoreEngine's high-performance recording and storage management software with up to five hot-swappable StorePak modules to provide up to 30TB of solid state storage in a compact, lightweight, rugged conduction cooled chassis*