

## Tornado X™

### Solid-State Data Acquisition & Storage Systems

Whether your application is airborne reconnaissance or test instrumentation, OnBoard Systems' TornadoX™ Data Storage System provides a modular and configurable data acquisition, processing, and storage system solution that can easily be integrated or embedded into a variety of aerospace

or commercial applications. With its extremely flexible architecture and data rate and memory depth growth capabilities, the versatile TornadoX™ offers significant performance improvements over conventional data recorders.



*Tornado X™*

Providing a variety of interfaces (such as Gigabit Ethernet, Fibre Channel and SCSI) and with an AES 256 encryption card option, the TornadoX™ solid-state recorder/storage system has demonstrated continuous record rates of over 728 Mbits/s, read rates over 690 Mbits/s and aggregate concurrent read-while-write rates of over 900 Mbits/s.

*OnBoard Systems expects to double these rates within the next 6 months. Additional data links can be utilized to accommodate even higher data rate requirements.*

Designed for operation in extreme environments, the conduction cooled TornadoX™ is the ideal onboard data storage system for simultaneous support of data management systems, Intelligence, Surveillance, and Reconnaissance (ISR) systems, communications systems, and instrumentation systems. Onboard Systems is producing systems with up to 1.6TBytes of non-volatile solid state storage (FLASH) capacity. The system can be configured for multiple TBytes of storage capacity.

#### **Systems & Processes Engineering Corp (SPEC)**

6800 Burleson Rd, Building 320

Austin, Texas 78744

512-479-7732

[www.spec.com](http://www.spec.com)

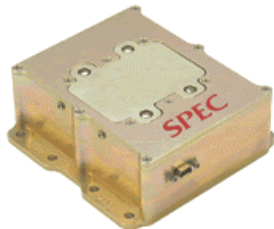
In addition to its high speed data transfer capability the TornadoX™ is designed to accommodate demanding solid-state mass storage requirements.

**Features:**

- *Modular design facilitates implementation of standard and custom interfaces*
- *Data encryption option*
- *Lightweight, low power, low volume, rugged construction*
- *VMEbus/PCibus/RACE++ open architecture structure*
- *Data throughput expandable to 6Gbps*
- *Memory capacity currently expandable from 120GB to multiple TBytes*
- *Removable Memory Units detach for quick swap-out*
- *Light Weight: <50 lbs.*  
*Low Power: <100 W*

**Other OnBoard Products Include:****Tornado16CR**

Records High G, short duration Acceleration Data using an internal accelerometer package and also has the capability of recording signals from 16 external sensors

**Tornado6DOF**

Records Acceleration Data in six degrees of freedom (6DOF)

**Represented by:**

*Cowboy Industries Inc.*  
12694 FM 2127 Bowie, Texas 76230  
Phone: 800-410-0181 Fax: 800-836-7579  
Email: [info@cowboyindustries.com](mailto:info@cowboyindustries.com)  
Website: [www.cowboyindustries.com](http://www.cowboyindustries.com)

**Contact Information:**

Joe Priest, VP SPEC  
Email: [priest@spec.com](mailto:priest@spec.com)  
Phone: 512.479.7732x2165  
Fax: 512.494.0756