

## VME SAS/SATA Solid State Disk Module



Phoenix International's VS1-250-SSD Serial Attached SCSI (SAS)/Serial ATA (SATA) based Solid State Disk VME blade delivers high capacity, high performance data storage for military, aerospace and industrial applications requiring rugged, secure and durable mass data storage.

This 6U, single-slot module houses one or two each 2.5" SAS or SATA SSDs of up to 16TB per device and can be interfaced through its front panel connector or its P2 connector. The high speed module will sustain R/W data rates exceeding 500MB/sec with an access time of 0.5 msec. The VS1-250-SSD has an operating temperature range from -40° to 85°C and functions at an altitude of 80,000 feet. The VS1-250-SSD also complies with current defense department security standards providing multiple levels of secure erase techniques.

As a drop in replacement for a traditional hard disk drive, the VS1-250-SSD offers significantly lower power consumption and eliminates seek time, latency and other electro-mechanical delays commonly associated with conventional rotating media.

The VS1-250-SSDs outstanding performance and versatility is enabled by Phoenix International's state-of-the-art technology which provides very high transfer and I/O rates, enhanced endurance and maximum data integrity.

### Features

- SAS or SATA SSDs
- Sustained data transfer exceeding 500MB/sec
- Total capacity to 32TB
- Individual point to point device connectivity
- Low power consumption
- 2,000,000 Hours MTBF
- Integrated MLC/SLC NAND Flash Meets military and IRIG 106-07 declassification standards
- AES 256 bit encryption
- Advanced flash management for enhanced reliability and durability
- Front panel or P2 connector data interface
- 80,000 feet operational altitude
- 60g, 11 ms operational shock
- 16g rms, 10-2000Hz random vibration
- Made in USA



# Rugged VME Solid State Disk Module

## TECHNICAL SPECIFICATIONS

### Physical

Size	160mm x 234mm (Double Eurocard) 4HP (1 Standard Slot)
Construction	Double-sided FR4 PCB

### Interface

Front panel or P2 connector  
Serial Attached SCSI (SAS)  
Serial ATA (SATA)

### Capacity

Unformatted to 32TB (two devices)

### Performance

Sustained data transfer rate	500+MB/sec
Random Write IOPS (4KB)	80,000

### Power (per device)

Input	5VDC, 12VDC +/- 5%
Idle	4.50W
Operational (max)	8.40W

### Reliability

MTBF	2,000,000 hours (Telcordia)
BER (bit error rate)	10e <sup>-16</sup>

### Environmental (operating)

Temperature	0°C to 70°C Commercial -40°C to 85°C Extended
Shock	60g half-sine, 11 ms
Vibration	16g rms, 10-2000Hz random
Altitude	80,000 feet
Relative Humidity	5% to 95%, non-condensing
Conformal Coating	Optional

## Phoenix International

Phoenix International is an AS9100 Rev D/ISO 9001:2015 certified, Small Business manufacturer of Rugged COTS data storage products. Phoenix developed state of the art enabling technology provides users with mass storage products that ensure the highest performance storage and data network systems. These systems range in size and application from multi-terabyte Fibre Channel RAID, NAS and Storage Area Network (SAN) configurations to conduction cooled plug-in VPX/VME solid state (flash) storage modules.



VC1-250-SSD Conduction Cooled Version



Phoenix International is AS 9100 Rev D/ISO 9001:2015  
Certified

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