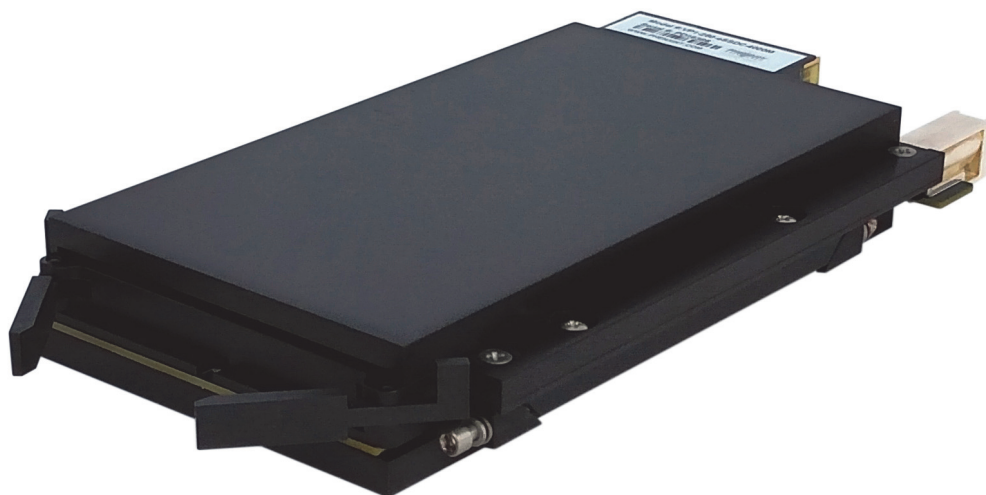


## Rugged Open VPX Conduction Cooled NVMe SSD Module



The VP1-250-eSSDC is a 3U VPX SSD storage module that delivers extremely high performance via a single Fat Pipe (PCIe x4 Gen2/3). Designed from the ground up to remove legacy layers of hard drive interfaces such as SATA and SAS, it takes full advantage of the speed and parallelism of solid state nonvolatile memory. Streamlined efficient queuing protocol combined with an optimized command set register interface enables low latency and high performance. Data is delivered fast and efficiently with minimal burden on the host CPU. The VP1-250-eSSDC supports TCG compliant AES-256 and FIPS 140-2 certified encryption.

NVM Express (NVMe) is an industry-standard registered interface designed to accelerate the performance of nonvolatile PCI Express (PCIe) SSDs. The NVMe protocol was established in collaboration by server industry leaders to standardize a scalable PCIe interface, making it easier for designers to unlock the full potential of PCIe. NVMe provides opportunities for increased data throughput and reduced latency all while reducing the number of drives needed — both now and in the future. Adoption of this industry standard is driven by a strong consortium of storage technology providers and a robust ecosystem of drivers across multiple operating systems.

### Features

Out-of-the-box software, drivers and manageability enable easy adoption and storage interoperability

Capacities up to 16TB

Optimized register interface and command set lowers latency

Performance:

Seq. 128KB read: 1.2 GB/s

Seq. 128KB write: 1.2 GB/s

Operating shock: 100G

Operating vibration: 16.3G<sub>RMS</sub>

Streamlined protocol with efficient queuing mechanism to scale for multi-core CPUs

TCG Compliant AES-256 and FIPS 140-2 Certified Encryption

Enhanced ATA Security/Authentication Support

Military Grade Data Elimination

Hardware and/or Software Write Protect

1,000,000 hours MTBF

Made in USA



# Rugged VPX Disk Module

## TECHNICAL SPECIFICATIONS

### Environmental

#### Form Factor:

3U VPX bus 6.299" (160mm) x 3.937" (100mm)

#### Module Interface:

PCIe x4 (Gen 2/3)

#### Temperature, operational:

Conduction-cooled with REDI (Vita 48) covers  
Temperature: -40° to 85°C (Module MUST  
operate in a fully installed Conduction Cooled,  
REDI cover rack)

#### Temperature, storage:

-55° to 105°C

#### Vibration:

16.3G<sub>RMS</sub>

#### Shock:

100G

#### Altitude:

80,000 feet

#### Relative Humidity:

5 to 95%, non-condensing

#### MTBF:

1,000,000 hours

#### Security Options:

- FIPS 140-2 Certified
- TCG AES-256 Self Encrypting Drive (SED)
- Enhanced ATA Security/Authentication Support
- Military Grade Data Elimination
- Hardware and/or Software Write Protect

### Compliance Specifications

The VP1-250-eSSDC NVMe Drive Module is designed to meet CE Emissions specification EN 55022, CE Immunity specification EN 50082-2 and FCC 47 CFR, Part 15, Class A when tested in a shielded enclosure. Meets VITA 46, 48 and 65: VPX System Specifications and Practices.

### 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 data storage and network attached 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 VME/VPX solid state (flash) storage modules.



3U Open VPX Air-Cooled Module



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

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