

HighPoint SSD6780 Series RAID Enclosures add 120TB of Gen4 NVMe Storage and 28Gb/s of Transfer Speed to any PCIe 4.0 Platform

April 2023 – Milpitas, CA – HighPoint launches the SSD6780 Series; the industry's first external 8-channel NVMe RAID solutions with dedicated end-to-end PCIe Gen4 x16 connectivity. The compact RAID enclosures can host upwards of 120TB of U.2, U.3 or M.2 NVMe RAID storage, at speeds up to 28,000MB/s, and can be easily integrated into any x86 Intel/AMD or ARM platform with a free PCIe 4.0 x16 slot. Due to the external connectivity and comprehensive Windows, Linux & macOS device driver support, SSD6780 series enclosures can be easily shared between multiple computing platforms, even those based on different hardware platforms. Measuring only 4.5" in height, SSD6780 enclosures are the most compact 8-bay storage solutions in today's marketplace. The vertically aligned 2.5" drive trays allow for a marked reduction in chassis height and mass. The small hardware footprint is ideal for applications that require a portable, easily serviced high-speed mass storage solution.

Industry Proven NVMe RAID Engine

SSD6780 series enclosures are powered by the HighPoint's proven NVMe RAID stack, and are capable of supporting one or more RAID 0, 1 and 10 arrays alongside single SSDs. This versatile technology enables administrators to quickly configure storage for any application, and tuned to optimize for performance, security or a balance of the two. RAID 1 mirroring protects data against the risk of device failure by creating a hidden duplicate of the target SSD, and is ideal for bootable volumes. Up to 8 SSDs can be configured into a RAID 0 stripe array to maximize storage performance and capacity. RAID 10 provides an ideal mix of security and performance, as it combines the speed of a stripe array with the mirrored data protection of a RAID 1 array.

Unbeatable Storage Performance

The SSD6780 series' flexible, performance-focused backplane architecture leverages intelligent PCIe switch technology to allocate x4 lanes of host bandwidth to each NVMe SSD. This enables each enclosure to deliver up to 28,000MB/s of transfer performance using just 4 or 5 NVMe SSDs!

Elegant, Single-Cable Connectivity Solution: The elegant cabling solution requires only a single connection between the enclosure and host platform. The external 1-meter CDFP cable was engineered to make installation a snap, while guaranteeing a stable, secure x16 lanes of dedicated connectivity between the NVMe SSDs and the host platform's PCIe 4.0 host bus.

Multi-CPU/Core Performance Optimizer: While multi-core/Multi-CPU platforms have plenty of resources, they may not be properly allocated to the target application and NVMe media. HighPoint's HPT-Optimize utility Simplifies the Complicated Tuning Process for all Multi-Core platforms.

End Thermal Throttling! The SSD6780 series' advanced cooling system ensures NVMe media performs optimally 24/7

In an effort to protect the integrity of hardware, Gen4 NVMe SSDs will employ a technique known as "thermal throttling" when a temperature threshold has been crossed. Thermal throttling, as the name implies, will adjust the drives output (transfer speed) to keep the media within the manufacturer's recommended threshold, essentially putting a "brake" on performance. Ensuring NVMe media stays cool, even under heavy load, is an essential part of any performance-focused NVMe solution. HighPoint SSD6780 series enclosures take a no-holds-barred approach to thermal throttling.

The robust, aluminum enclosures employ a pair of powerful, low-decibel cooling fans to ingest cool air from the outside environment and circulate it throughout the interior of the chassis. Waste heat is then drawn away from the SSD media and critical RAID controller componentry and dispensed through the ventilated drive trays.

The dedicated cooling hardware is bolstered by a real-time monitoring system that incorporates full fan control with LED indication, an audible alarm, and HighPoint's field-proven SHI technology. SHI (Storage Health Inspector)

enables administrators to monitor the temperature of each NVMe SSD in real time, and configure warning thresholds to correspond with each make & model, via the WebGUI and CLI software suites.

Keep tabs on Critical Storage Assets with a Simple Glance

The SSD6780 series features a self-diagnosing LED notification system and sensor suite that actively surveys and reports enclosure and SSD temperatures, status of the host to device cable connection and PCIe lane assignment, and the condition and status of RAID arrays. These services were designed to work in conjunction with the HighPoint's SHI (Storage Health Inspector) feature of the WebGUI and CLI management utilities, and are universally compatible with Linux, macOS and Windows based computing platforms.

Integrated Hot-Plug & Hot-Swap Capability Streamlines Field Service & Maintenance Workflows:

Unlike the vast majority of NVMe based storage solutions in today's marketplace, SSD6780A RAID enclosures feature true Hot-Plug and Hot-Swap capability. Hot-Swap capability is a huge boon for NVMe technology, as it can drastically streamline service and upgrade workflows.

Administrators can add or remove one or more NVMe SSDs on the fly, as necessity demands. This includes RAID and single-drive configurations. The SSD6780A will automatically notify the operating system of any changes, in real time – no reboot required!

Pricing and Availability

SSD6780 series NVMe RAID enclosures are set to launch in June of 2023, and will be available direct from our E-Store and our Certified Global Resale and Distribution partners.

[SSD6780A](#) 8-Bay PCIe 4.0 x16 U.2/U. NVMe RAID Enclosure: \$2,299.00

[SSD6780M](#) 8-Bay PCIe 4.0 M.2 NVMe RAID Enclosure: [Contact HighPoint Sales](#)