

# rSSD 7101 NVMe RAID Drive Series

## 20x SATA SSD Performance in a Single PCIe Device

- Speed – Revolutionizes Secondary Storage I/O Speeds; up to 13,500MB/s
- Compact – Delivers the performance of 20x SATA SSD's in a single PCIe device
- Independent – Not locked to specific brands or models of system platforms
- Flexible – Designed for Integration into PC systems with true PCIe 3.0 x16 bandwidth
- Zero Throttling – Aluminum casing & Fan ensure SSDs stay cool to avoid performance throttling

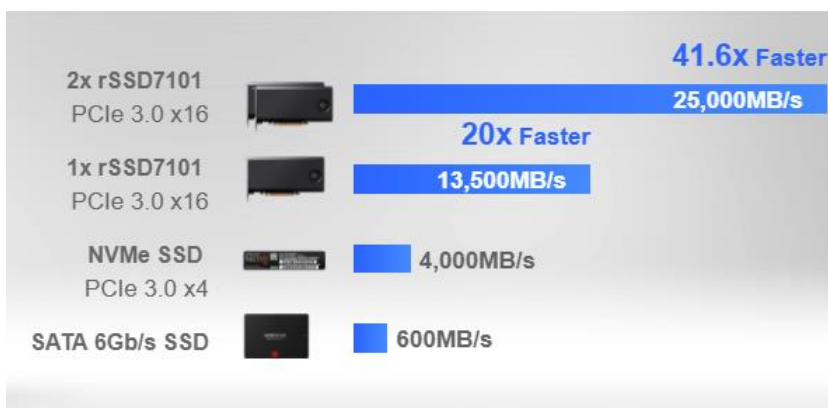


*Dedicated PCIe 3.0 x16*

### A Paradigm shift for Compact System Acceleration

rSSD7101 Series RAID Drives pack the power of a 20x SATA SSD RAID Array into a compact, stand-alone PCIe device that can be easily installed into nearly any type of workstation or server platform!

This unconventional approach to NVMe storage represents a paradigm shift in the development of system acceleration solutions.



Compact workstations and servers can now tackle complex projects and workflows that were once exclusive to specialized hardware platforms.

### Independent, Stand-Alone NVMe SSD Storage for Windows & Linux Servers:

rSSD7101 Drives are truly independent, stand-alone solutions, and are not limited to specific applications or hardware environments. rSSD7101 drives are available in 500GB to 8TB form factors, and unlike conventional PCIe SSD's, are not restricted to a particular workstation or motherboard and can be used with any Windows 10 (or later) and Linux Kernel 3.3 (or later) PC platform that provides a true PCIe 3.0 x16 host interface.

### Scale Performance and Capacity across multiple rSSD7101 Drives

The HighPoint rSSD Management Solution's seamless interface was designed to accommodate applications that require transfer speeds exceeding 12GB/s, or capacities larger than 8TB. This simple and versatile storage solution can easily scale performance to match the requirements of each application.

A single rSSD7101 series drive can aggregate up to four M.2 SSD modules at PCIe x16 bandwidth and 8TB of storage capacity, and double that when used in dual configurations, all at a price per GB comparable to that of traditional SATA SSD-based solutions.

## Zero Performance Throttling

rSSD7101 RAID Drives feature an aluminum casing and powerful fan to keep the NVMe SSDs cool. This prevents the SSDs from throttling back performance to avoid overheating, and ensures maximum transfer performance even during the most intense workloads.

## Robust and Streamlined Design Protects and Cools SSD Modules

It's no secret that PCIe devices can generate a great deal of heat, especially during peak operation. HighPoint is no stranger to PCIe design, and has engineered the rSSD7101 Drive Series to excel in high-stress conditions. The all-aluminum casing naturally dissipates waste heat away from the SSD modules, and features an integrated fan and heat sink that work in conjunction to eject excess heat away from vital components and keep ambient temperatures manageable and cool.

## HighPoint rSSD Manager

rSSD7101 Series RAID Drives feature an easy to configure SSD drive module with integrated TRIM support and SMART monitoring. TRIM support promotes the longevity and endurance of each SSD while SMART monitoring allows customers to keep close tabs on the physical attributes of each device, including temperature readings, total bytes written and disk usage values; essential tools for planning, configuring and maintaining mission critical SSD storage. Quick Configuration menus allow new users to get everything up and running with a few simple clicks. In depth, Advanced Options allow experienced professionals to fine tune SSD module configurations for specific applications.

## rSSD7101A Series – E-Class SSD's (Enthusiast Applications)

rSSD7101A Series RAID Drives deliver next-generation PC storage performance, and are ideal for high-end desktops and workstations. rSSD7101A Drives are available with up to 4TB of capacity, can support sustained transfer speeds exceeding 12,000MB/s, and are compatible with nearly any modern motherboard platform with a free PCIe x16 slot.

#	Model	Capacity	Warranty	Performance
1	rSSD7101A-500G	500GB	3 Years or 2x 100TBW	Read: 6,800MB/s Write: 3,000MB/s
2	rSSD7101A-010T	1TB	3 Years or 4x 100TBW	Read: 13,000MB/s Write: 6,000MB/s
3	rSSD7101A-020T	2TB	3 Years or 4x 200TBW	Read: 13,000MB/s Write: 7,000MB/s
4	rSSD7101A-040T	4TB	3 Years or 4x 400TBW	Read: 13,000MB/s Write: 7,500MB/s

## rSSD7101B Series – P Class SSD’s (Professional Applications)

rSSD7101B Series RAID Drives deliver unprecedented storage performance and reliability, and are ideal for heavy workloads such as professional media and engineering applications. rSSD7101B Drives are available with up to 8TB of capacity, and can support sustained transfer speeds exceeding 13,000MB/s.

#	Model	Capacity	Warranty	Performance
1	rSSD7101B-010T	1TB	5 Years or 2x 400TBW	Read: 6,800MB/s Write: 4,000MB/s
2	rSSD7101B-020T	2TB	5 Years or 4x 400TBW	Read: 13,500MB/s Write: 8,000MB/s
3	rSSD7101B-040T	4TB	5 Years or 4x 800TBW	Read: 13,500MB/s Write: 8,000MB/s
4	rSSD7101B-080T	8TB	5 Years or 4x 1,200TBW	Read: 13,500MB/s Write: 8,000MB/s

Feature Specifications		Storage Management	
Bus Interface	16-lane, PCI Express 3.0 Compliant	Disk media scan and repair	Yes
Storage Mode	Data Storage (non-bootable)	Device Error Recovery support	Yes
Form Factor	Full Height	Operating Environment	
Dimensions	8.39" x 5.00" x 0.85"	Work Temp	+5°C ~ + 55°C
Cooling	Aluminum casing with single 50x50 fan	Storage Temp	-20°C ~ +80°C
Platform Support	<a href="#">(Please refer to the Motherboard Compatibility List)</a>	Relative Humidity	5% ~ 60% non-condensing
Operating System	Windows 10 64-bit, Linux Kernel 3.3 or later	Operating Voltage	PCI-e: 12V, 3.3V
Storage Health Inspector NVMe SSD SMART & TBW status	Yes	Power	Typical: 25W
Auto Garbage Collection Algorithm	Yes	MTBF (Mean Time Before Failure)	920,585 Hours
TRIM Support	Yes	Compliance Certification	CE, FCC, RoHS, REACH, WEEE

Management Suites	rSSD Manager (browser-based management tool)
	CLI (Command Line Interface- scriptable configuration tool)
	API package
SMTP Email Alert Notification	Yes

rSSD7101A Series				
Model	rSSD7101A-500G	rSSD7101A-010T	rSSD7101A-020T	rSSD7101A-040T
Data Transfer Rates*	Sequential Read: 6,800MB/s	Sequential Read: 13,000MB/s	Sequential Read: 13,000MB/s	Sequential Read: 13,000MB/s
	Sequential Write: 3,000MB/s	Sequential Write: 6,000MB/s	Sequential Write: 7,000MB/s	Sequential Write: 7,500MB/s
Capacity	500G	1TB	2TB	4TB
	(M.2 NVMe SSD x2)	(M.2 NVMe SSD x4)	(M.2 NVMe SSD x4)	(M.2 NVMe SSD x4)
RAID Level support (Windows)	Preconfigured RAID 0,	Preconfigured RAID 0,	Preconfigured RAID 0,	Preconfigured RAID 0,
	Supports RAID 0, 1 & Single Disk	Supports RAID 0, 1, 1/0 & Single Disk	Supports RAID 0, 1, 1/0 & Single Disk	Supports RAID 0, 1, 1/0 & Single Disk
RAID Level Support (Linux)	Preconfigured RAID 0	Preconfigured RAID 0	Preconfigured RAID 0	Preconfigured RAID 0
<i>Note: RAID 1/0 equal to "RAID 10"</i>				
TRIM Support	RAID 0, 1	RAID 0, 1, 1/0	RAID 0, 1, 1/0	RAID 0, 1, 1/0
	<i>Note: RAID 1/0 equal to "RAID 10"</i>			
Warranty	3 Years or 2x 100TBW	3 Years or 4x 100TBW	3 Years or 4x 200TBW	3 Years or 4x 400TBW
Kit Contents	Pre-config NVMe RAID Drive			
	Quick Installation Guide			

rSSD7101B Series				
Model	rSSD7101B-010T	rSSD7101B-020T	rSSD7101B-040T	rSSD7101B-080T
Data Transfer Rates*	Sequential Read: 6,800MB/s	Sequential Read: 13,500MB/s	Sequential Read: 13,500MB/s	Sequential Read: 13,500MB/s
	Sequential Write: 4,000MB/s	Sequential Write: 8,000MB/s	Sequential Write: 8,000MB/s	Sequential Write: 8,000MB/s
Capacity	1TB	2TB	4TB	8TB
	(M.2 NVMe SSD x2)	(M.2 NVMe SSD x4)	(M.2 NVMe SSD x4)	(M.2 NVMe SSD x4)
RAID Level support (Windows)	Preconfigured RAID 0,	Preconfigured RAID 0,	Preconfigured RAID 0,	Preconfigured RAID 0,
	Supports RAID 0, 1 & Single Disk	Supports RAID 0, 1, 5, 1/0 & Single Disk	Supports RAID 0, 1, 5, 1/0 & Single Disk	Supports RAID 0, 1, 5, 1/0 & Single Disk
RAID Level Support (Linux)	Preconfigured RAID 0	Preconfigured RAID 0	Preconfigured RAID 0	Preconfigured RAID 0
<i>Note: RAID 1/0 equal to "RAID 10"</i>				
TRIM Support	RAID 0, 1	RAID 0, 1, 1/0	RAID 0, 1, 1/0	RAID 0, 1, 1/0
	<i>Note: RAID 1/0 equal to "RAID 10"</i>			
Warranty	5 Years or 2x 400TBW	5 Years or 4x 400TBW	5 Years or 4x 800TBW	5 Years or 4x 1,200TBW
Kit Contents	Pre-config NVMe RAID Drive			
	Quick Installation Guide			

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