



# Cheetah Storage Box 1000

PERFORMANCE.**EXPANDED.**





Cheetah Raid  
STORAGE

# Cheetah Storage Box 1000

The High Capacity, Fastest and Most Modular  
Direct Attached NVMe Storage Device for VDI and HPC

**BLAZING  
12GB/s  
SPEED**



**8 DRIVES**



**[ 1U ]**



The Cheetah Storage Box 1000 (CSB1000) direct-attached storage is a first generation small-form factor NVMe 2.5-inch drive expansion enclosure. Designed for legacy servers, CSB1000 eliminates the need to purchase new server platform to gain the significant performance improvement NVMe offers over SAS SSDs.

- ✓ High Capacity – 1U chassis with 25TB+ SSD NVMe storage
- ✓ High Density – 1U high chassis - attach one CSB1000 per PCIe slot in server
- ✓ High Speed – All Gen3 PCIe performance, no latencies, high IOPS, zero performance trade-off
- ✓ High Serviceability – LCD status panel and web interface, hot swappable NVMe drives and 650-watt redundant power supply
- ✓ Way better than SAS/SATA – Enhanced security, 10x faster, 20x more compact, and 100x more reliable compared to legacy storage
- ✓ **Modular Scalability** – Pay as you go, install variety of drive sizes
- ✓ Hardware Agnostic – Works with existing or new servers
- ✓ Transparent Connection – Highly reliable “box to box” PCIe Gen3 connection with no additional software required
- ✓ Highly Engineered Cable – Proprietary PCIe Gen3 cabling tuned for high signal integrity
- ✓ Top Quality Design – Unmatched PCIe expertise and supreme materials for data integrity
- ✓ Manufacturing Test – Supreme quality control and thorough error code testing for each unit
- ✓ Pre-Sales Technical Support – Access to engineering and support resources before you buy

PCI  
EXPRESS®

**nvm**<sup>™</sup>  
EXPRESS

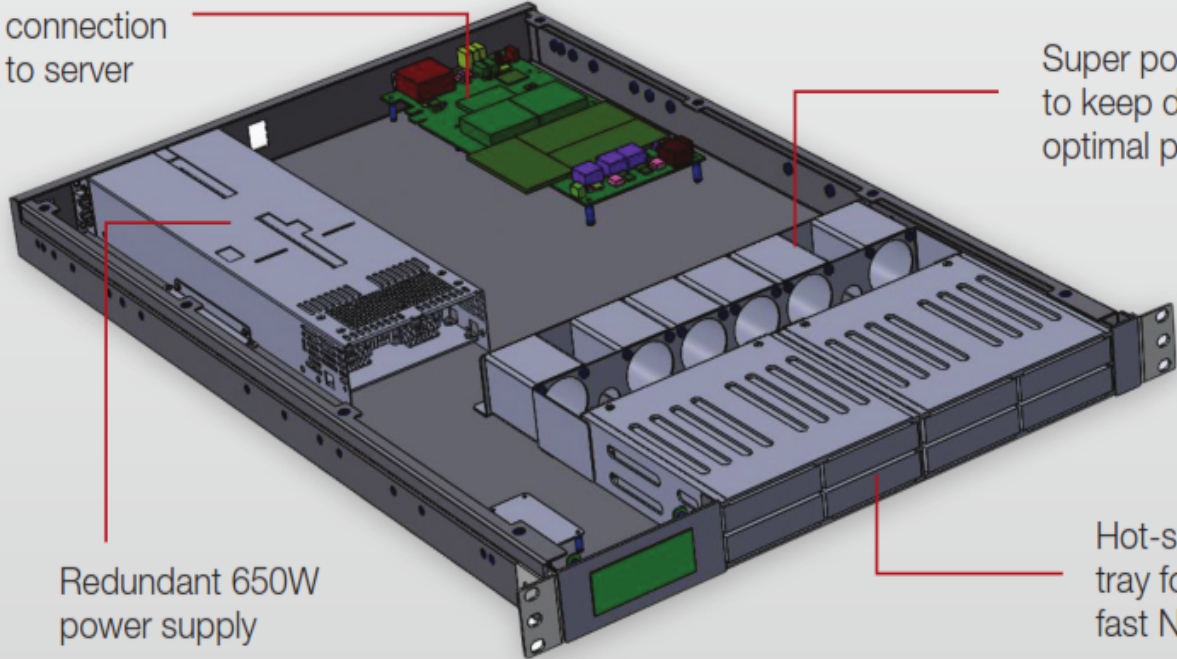
# Cheetah Storage Box 1000

PCIe Gen3 connection to server

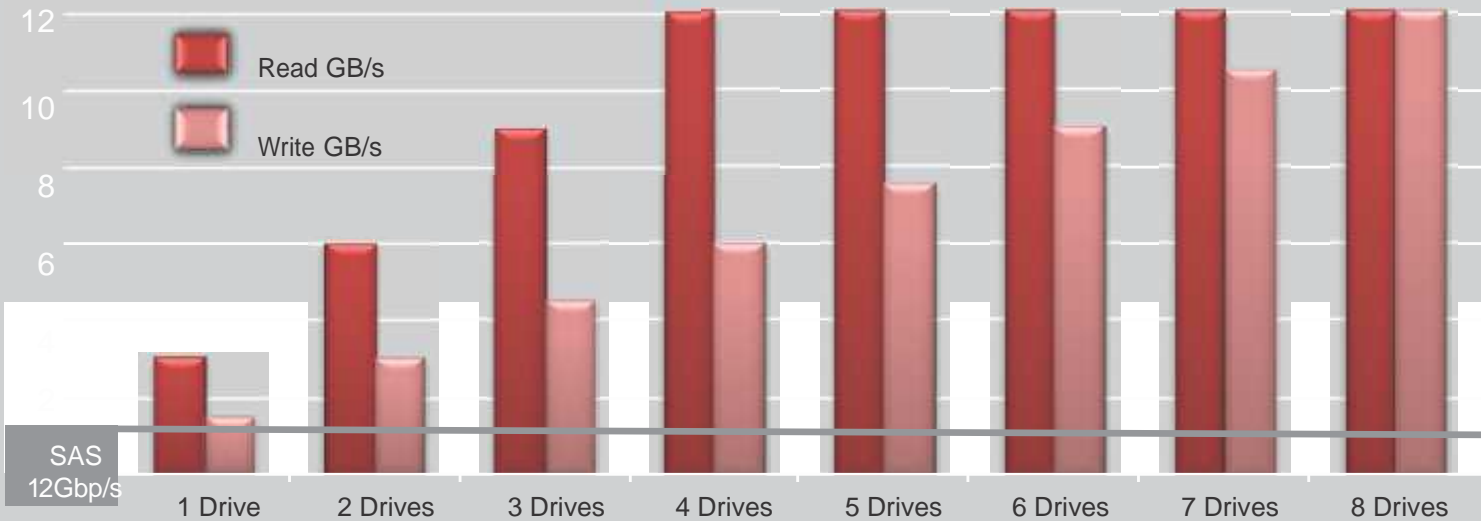
Super powerful cooling fans to keep drives working at optimal performance

Redundant 650W power supply

Hot-swappable 2.5" tray for installation of fast NVMe SSD drives



## Benchmarking Performance



# Cheetah Storage Box 1000

## Integrate NVMe Storage to any Compatible Server

Cheetah Storage Box 1000 (CSB1000) provides 25.6TB of NVMe SSD storage through eight 2.5" drives. The CSB1000 attaches through a PCIe card and cable operating at 128Gbps. This 1U JBOF (Just a Bunch of Flash) provides super-fast drive performance and low latency for the most demanding VDI and HPC applications.

**Standalone Integration:** The CSB1000 attaches to PCIe Gen3 servers using Cheetah's x16 Gen3 PCIe host card and specialized high performance Gen3 PCIe cable.

**Maximum Drive Performance:** Experience up to 12+GB/s bandwidth (12x bandwidth of high end SAS).

**Designed for Scalability:** One CSB1000 holds up to eight (8) NVMe drives per PCIe slot and offers scalability capacity to thirty-two (32) NVMe drives using a Cheetah ExpressBox 3600 and four Cheetah CSB1000s.

**Hot-Swappable Drives:** Remove and replace eight (8) 2.5" NVMe drives - no need to turn off and reboot.

**Remote Management Monitoring:** Easy web interface for power user to check health of device. PCIe lane performance, drive operations parameters, fan and error conditions are viewable on the LCD screen and reported through web interface.

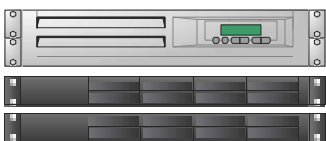
**RAID Support:** Software RAID level support provided by the drive manufacturer.

**Reliability, Accessible and Serviceable:** High performance fans, robust 650W redundant power supply and optimal thermal design.

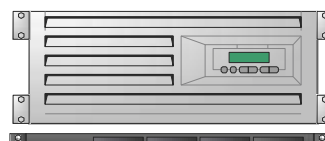
**Made for Rack-mounting:** Rack slides from Accuride are shipped pre-installed for easy installation.

**Compatibility:** Cheetah CSB1000 is a complementary product to any compatible 2U enterprise servers from OEMs like Cisco, Lenovo, IBM and Oracle. NVMe drivers are available across operating systems – including Windows and Linux. The full list operating system driver support is available online with the NVM Express organization.

### Box to Box Design – Server to CSB1000



2 U Server  
2 PCIe Slots  
1 U CSB1000  
1 U  
4U Rack Space  
One SB1000 per PCIe Slot



4 U Server  
4 PCIe Slots  
1 U CSB1000  
1 U  
1 U  
1 U  
8U Rack Space  
One CSB1000 per PCIe Slot

# Specs

	Product Name	Cheetah Storage Box 1000	
	Part Number	CSB1000	
	Description	Direct-attached storage NVMe drive enclosure	
	Cable Options	1 meter - Part Number: CBL1G3	2meter - Part Number: CBL2G3
Drives and Capacity	Drives	Up to eight (8) 2.5-inch hot-pluggable NVMe solid-state drives (SSD)	
	Performance & Capacities	Intel® Drive Options SSD DC P3700 Series SSD DC P3600 Series	HGST Drive Options UltraStar SN100 (3.2TB, 1.6TB)
	Max. Capacity (per enclosure)	Up to 25.6TB when using 8 x 3.2TB NVMe SSD	
Host Connectivity	Connection	Low profile x16 PCIe Gen3 card and 2 cables	
	Operating Systems	Microsoft Windows, Windows Server Linux, UNIX, Solaris, Hypervisors	
Enclosure Monitoring and RAID	Fan	Tachometer reports RPM of each of the dual fans	
	GUI	Web server accessible over Ethernet port on rear of chassis. Front panel: any	
	LCD Panel	Display indicates power to the box, IP address of the web server and fan speeds	
	RAID	Software RAID level support provided by the drive manufacturer	
Back-Panel Connectors	Host Connectivity	2 PCIe connectors for connection to server = x16 cable	
	Service Management	1 Ethernet connector for connection to system monitoring tool	
Enclosure	Rack Spaces	1U High	
	Dimensions	19" wide, 1.75" tall, 28" deep	
	Power Supply	650 Watt Redundant Input voltage range 100~240VAC Full Range Frequency range 47/63 Hz	
	Expansion	Multiple CSB1000 can be connected through any available PCIe slot in server	
	Cooling	Six 30.2 CFM fans for drives One fan in each power supply module	
	Rack support	Accuride Model 2907WB	
	Weight	46lbs	
Environmental	Environmental	Operating 0° to 70°C Storage: -40° to 70° C	
Regulatory	FCC Class A Verified	CE Certified RoHS compliant	
Warranty	Return to Factory	1 Year or more	
Certifications	ISO 9001:2008 Certified	NVMe Specification 1.2a	
	PCISIG	PCI Express Specifications: Rev 3.1	

Specifications are subject to change without notice.