



FIRECUDA
GAMING



DATA SHEET

Explosive Speed. Absolute Domination.

FireCuda 530 Heatsink SSD



Blistering performance and unrivalled endurance — Seagate® FireCuda® 530 redefines *speed* — up to 7,300 MB/s catalyses PCIe® Gen4 power. With transfer rates 2× faster than PCIe Gen3, FireCuda 530 is built for sustained abuse and dependable performance. The speed of PCIe Gen4 is yours — seize the power.



Best-Fit Applications

- High-performance gaming desktops
- Creative professional systems



Key Advantages

Speed Reigns. FireCuda 530 dominates the SSD lineup — delivering pure performance, absolute power, the most advanced components and unrivalled endurance.

Absolute Performance. At up to 7,300 MB/s you can harness the full power of PCIe Gen4 speeds to dominate next-generation games and applications.

Cool Speed Ahead Heatsink technology keeps things cooler to maintain performance longer.

Storage Expansion for PS5™ The FireCuda 530 heatsink is compatible with PS5 consoles and meets PS5 specs on performance and dimensions for an easy drop-in expansion solution with no additional parts needed.

Fastest. FireCuda. Ever. Built for sustained, pro-level gaming and accelerated content creation with transfer speeds up to 2× faster than PCIe Gen3 NVMe SSDs and up to 12× faster than SATA SSDs.

Latest Tech. Built with a Seagate-validated E18 controller and the latest 3D TLC NAND, FireCuda 530 provides the most advanced speed and durability so you can push the limits of your machine.

Endurance Unleashed. Designed to perform under heavy use and tough enough to go the distance — up to 5,100 TB TBW means you can write and delete 70% of the drive capacity, every day, for five years.

Rescue Services. Rest easy with three years of Rescue Data Recovery Services¹, offering an industry-leading 95% success rate against unexpected data loss.

¹ Rescue Data Recovery Services not available in all countries.



Specifications	4TB	2TB	1TB	500GB
Standard Model	ZP4000GM30023	ZP2000GM30023	ZP1000GM30023	ZP500GM30023
Interface	PCIe Gen4 x4 NVMe 1.4	PCIe Gen4 x4 NVMe 1.4	PCIe Gen4 x4 NVMe 1.4	PCIe Gen4 x4 NVMe 1.4
NAND Flash Memory	3D TLC	3D TLC	3D TLC	3D TLC
Form Factor	M.2 2280 with heatsink ¹	M.2 2280 with heatsink ¹	M.2 2280 with heatsink ¹	M.2 2280 with heatsink ¹
Performance				
Sequential Read (Max, MB/s), 128 KB ²	7,250	7,300	7,300	7,000
Sequential Write (Max, MB/s), 128 KB ²	6,900	6,900	6,000	3,000
Random Read (Max, IOPS), 4 KB QD32 T8 ²	1,000,000	1,000,000	800,000	400,000
Random Write (Max, IOPS), 4 KB QD32 T8 ²	1,000,000	1,000,000	1,000,000	700,000
Endurance/Reliability				
Total Bytes Written (TB)	5100	2550	1275	640
Mean Time Between Failures (MTBF, hours)	1,800,000	1,800,000	1,800,000	1,800,000
Rescue Data Recovery Services (years) ³	3	3	3	3
Warranty, Limited (years)	5	5	5	5
Power Management				
Active Power, Average (W)	8.6	7.8	6.3	6
Idle Power PS3, Average (mW)	30	25	20	15
Low Power L1.2 mode (mW)	<5	<5	<5	<5
Environmental				
Temperature, Operating Internal (°C)	0°C – 70°C	0°C – 70°C	0°C – 70°C	0°C – 70°C
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C
Shock, Non-operating: 0.5 ms (Gs)	1,500	1,500	1,500	1,500
Special Features				
TRIM	Yes	Yes	Yes	Yes
S.M.A.R.T.	Yes	Yes	Yes	Yes
Halogen-free	Yes	Yes	Yes	Yes
RoHS compliance	Yes	Yes	Yes	Yes
Physical				
Length (mm/in, max)	3.156 in	3.156 in	3.156 in	3.156 in
Width (mm/in, max)	24.2 mm/0.953 in	24.2 mm/0.953 in	24.2 mm/0.953 in	24.2 mm/0.953 in
Height (mm/in, max)	11.04 mm/0.435 in	10.39 mm/0.41 in	9.84 mm/0.388 in	9.84 mm/0.388 in
Weight (lb/g)	47 g/0.104 lb	47 g/0.104 lb	47 g/0.104 lb	47 g/0.104 lb

¹ Please verify that your system provides enough space for installation. The FireCuda 530 with heatsink exceeds dimensions of a standard M.2 2280 form factor. Heatsink is pre-installed and should not be removed as it can damage the SSD.

² Fresh out of box (FOB) performance obtained on newly formatted drive. Performance may vary based on SSD's firmware version, system hardware, and configuration. Performance based on CrystalDiskMark v.7.0.0 x64 on Windows 10 host with PCIe Gen4 motherboard.

³ Rescue Data Recovery Services not available in all countries.



Specifications			
Retail Packaging	Box Dimensions	Master Carton Dimensions	Pallet Dimensions
Length (in/mm)	5.285 in/134.25 mm	5.079 in/129 mm	47.992 in/1,219 mm
Width (in/mm)	4.291 in/109 mm	10.945 in/278 mm	20 in/508 mm
Depth (in/mm)	0.945 in/24 mm	6.654 in/169 mm	27.795 in/706 mm
Weight (lb/kg)	0.137 lb/0.062 kg	2.028 lb/0.92 kg	104.808 lb/47.54 kg
Quantities			
Boxes per Master Carton	10		
Master Cartons per Pallet	48		
Pallet Layers	4		

System Requirements	What's Included
---------------------	-----------------

- M.2 (M key) slot, PCIe® G4 x4 interface (backwards compatible with PCIe G3 interface)
- Windows® 10
- Linux
- Seagate® FireCuda® 530 SSD with Heatsink

Region	Model Number	Capacity	Limited Warranty (years)	UPC Code	EAN Code	Multi-Pack UPC
WW	ZP500GM3A023	500GB	5	763649167540	8719706426022	10763649167547
WW	ZP1000GM3A023	1TB	5	763649167557	8719706426039	10763649167554
WW	ZP2000GM3A023	2TB	5	763649167564	8719706426046	10763649167561
WW	ZP4000GM3A023	4TB	5	763649167571	8719706426053	10763649167578

seagate.com



©2021 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. FireCuda and the FireCuda logo are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. The PCIe word mark and/or PCIExpress design mark are registered trademarks and/or service marks of PCI-SIG. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and drive capacity. Seagate reserves the right to change, without notice, product offerings or specifications. DS2072.2-2107GB July 2021