

600 Pro SSD

Data Sheet

A Class Above Client SSDs

- Delivers the highest IOPS/watt to improve system performance and reduce power and cooling costs for performance-hungry data center and cloud applications
- Fast, consistent performance and low latency over the warranty period of the drive
- Helps reduce performance gaps between storage I/O and CPU operations
- Provides up to 480GB user capacity
- Helps safeguard data against unexpected power loss
- Helps protect data from undetected, unintentional corruption (silent errors)
- One drive—many use cases

Best-Fit Applications

- Performance-hungry, read-intensive, data center applications, such as data indexing, edge caching, data streaming, or gaming/software delivery
- Cloud system builders, cloud service providers, content delivery networks and virtualized enterprise environments that demand the highest IOPS/W value
- Green IT and TCO reduction initiatives
- Power- and space-constrained data centers



600 Pro SSD



Beyond a client SSD, the Seagate® 600 Pro SSD drive leverages proven enterprise expertise, an enterprise-tuned feature set and manufacturing excellence to deliver high levels of data integrity, manageability, interoperability and support. Optimized for NAND technology, Seagate multilayered error recovery technology with advanced error

detection and correction encoding helps ensure data integrity. Seagate conducts extensive, rigorous failure condition and interoperability testing to deliver the quality and interoperability expected of a true enterprise-class SSD. And of course, this drive is backed by industry-leading support, deep supply chain relationships and global partner networks.

Specifications	480GB ¹	400GB ¹	240GB1	200GB1	120GB ¹	100GB ¹
Model Number	ST480FP0021	ST400FP0021	ST240FP0021	ST200FP0021	ST120FP0021	ST100FP0021
Interface Options	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
NAND Flash Type	MLC	MLC	MLC	MLC	MLC	MLC
Performance						
Sustained Data Transfer Rate (MB/s)	520	520	520	520	520	520
I/O Data Transfer Rate, Max (MB/s)	600	600	600	600	600	600
Sequential Read/Write Command Rate (MB/s) Peak, 128KB	520/450	520/450	520/450	520/450	520/300	520/300
Random Read/Write Command Rate (KIOPS) Peak, 4KB	85/11	85/30	85/11	85/30	80/8	80/20
Configuration/Reliability						
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E16	1 per 10E16	1 per 10E16	1 per 10E16	1 per 10E16	1 per 10E16
Annualized Failure Rate (AFR)	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%
Total Terabytes Written (TBW) Over Warranty Period ²	350	1080	134	520	24	220
Limited Warranty With Media Usage (years) ³	5	5	5	5	5	5
Power Management						
+5V Max Start Current (A)	0.5	0.5	0.5	0.5	0.5	0.5
Average Sleep Power (W)	0.5	0.5	0.5	0.5	0.5	0.5
Average Idle Power (W)	1.25	1.25	1.05	1.05	1.05	1.05
Average Operating Power (W)	2.8	2.8	2.8	2.8	2.8	2.8
Environmental						
Internal Operating Temperature (°C)	0 to 70	0 to 70	0 to 70	0 to 70	0 to 70	0 to 70
Nonoperating Temperature (°C)	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75
Temperature Change Rate/Hr, Max (°C)	20	20	20	20	20	20
Relative Humidity, Noncondensing (%)	5 to 95	5 to 95	5 to 95	5 to 95	5 to 95	5 to 95
Shock, 0.5ms (Gs)	1000	1000	1000	1000	1000	1000
Vibration, 20Hz to 2000Hz (Grms)	11.08	11.08	11.08	11.08	11.08	11.08
Physical						
Height (mm/in) ⁴	7.0/0.276	7.0/0.276	7.0/0.276	7.0/0.276	7.0/0.276	7.0/0.276
Width (mm/in) ⁴	70.10/2.76	70.10/2.76	70.10/2.76	70.10/2.76	70.10/2.76	70.10/2.76
Depth (mm/in) ⁴	100.45/3.955	100.45/3.955	100.45/3.955	100.45/3.955	100.45/3.955	100.45/3.955
Weight (g/lb)	100/0.220	100/0.220	100/0.220	100/0.220	100/0.220	100/0.220
Carton Unit Quantity	20	20	20	20	20	20
Cartons per Pallet	45	45	45	45	45	45
Cartons per Layer	9	9	9	9	9	9

¹ One gigabyte, or GB, equals one billion bytes when referring to drive capacity.

www.seagate.com

AMERICAS ASIA/PACIFIC EUROPE, MIDDLE EAST AND AFRICA Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000 Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888 Seagate Technology SAS 16–18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

© 2013 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Wave logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. 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. Seagate reserves the right to change, without notice, product offerings or specifications.

² Per the JEDEC JESD218A standard using enterprise workload JESD219A with all LBAs allocated.

³ Warranty period is either 5 years or when the device life indicator has shown that the device has exhausted its useful life, as defined in the product manual, whichever comes first.

⁴ The drive physical dimensions conform to the Small Form Factor Standard (SFF-8201) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.