

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 centre 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

- Perfect for performance-hungry, read-intensive, data centre applications, such as data indexing, edge caching, data streaming or gaming/software delivery
- Cloud system builders, cloud service providers, content delivery networks and virtualised enterprise environments that demand the highest IOPS/W value
- · Green IT and drive-retirement cost reduction initiatives
- · Power- and space-constrained data centres



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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. Optimised 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	480GB1	400GB1	240GB1	200GB1	120GB1	100GB1
Model Number	ST480FP0021	ST400FP0021	ST240FP0021	ST200FP0021	ST120FP0021	ST100FP0021
Interface Options	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						
Non-recoverable Read Errors per Bits Read, Max	1 per 1016					
Annualised Failure Rate (AFR)	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%
Total Terabytes Written (TBW) Enterprise Workload Over Warranty Period ²	500	1,190	250	600	105	280
Total Terabytes Written (TBW) Sequentially Over Warranty Period ²	2,630	2,630	1,320	1,320	650	650
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 Operating Power (W)	0.5	0.5	0.5	0.5	0.5	0.5
Average Idling 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					
Non-operating Temperature (°C)	-40 to 75					
Temperature Change Rate/Hr, Max (°C)	20	20	20	20	20	20
Relative Humidity, Non-condensing (%)	5 to 95					
Shock, 0.5ms (Gs)	1,000	1,000	1,000	1,000	1,000	1,000
Vibration, 20Hz to 2,000Hz (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

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.

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