

# 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

- 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 multi-layered 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 <sup>1</sup>	400GB <sup>1</sup>	240GB <sup>1</sup>	200GB <sup>1</sup>	120GB <sup>1</sup>	100GB <sup>1</sup>
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
<b>Performance</b>						
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 (IOPS) Peak, 4KB	85/11	85/30	85/11	85/30	80/8	80/20
<b>Configuration/Reliability</b>						
Non-recoverable Read Errors per Bits Read, Max	1 per 10 <sup>16</sup>	1 per 10 <sup>16</sup>	1 per 10 <sup>16</sup>	1 per 10 <sup>16</sup>	1 per 10 <sup>16</sup>	1 per 10 <sup>16</sup>
Annualised Failure Rate (AFR)	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%
Total Terabytes Written (TBW) over Warranty Period <sup>2</sup>	350	1,080	134	520	24	220
Limited Usage-Based Warranty (years) <sup>3</sup>	5	5	5	5	5	5
<b>Power Management</b>						
+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
<b>Environmental</b>						
Internal Operating Temperature (°C)	0 to 70	0 to 70	0 to 70	0 to 70	0 to 70	0 to 70
Non-operating 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)	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
<b>Physical</b>						
Height (mm/in) <sup>4</sup>	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) <sup>4</sup>	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) <sup>4</sup>	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

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

<sup>2</sup> Per the JEDEC JESD218A standard, using enterprise workload JESD219A with all LBAs allocated

<sup>3</sup> Warranty period is either 5 years or when the device life indicator reaches zero (0), whichever comes first.

<sup>4</sup> The drive physical dimensions conform to the Small Form Factor Standard (SFF-8201) found at [www.sffcommittee.org](http://www.sffcommittee.org). For connector-related dimensions, see SFF-8223.

[www.seagate.com](http://www.seagate.com)

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