

## SAMSUNG 850 PRO SATA III 2.5INCH 512GB SSD



Samsung ushers in a new era of high-capacity solid-state drives with the world's first 2TB SSD for client PCs. Powered by 3D V-NAND, the SSD 850 PRO 512GB allows you to store your programs and data onto one drive, resulting in incredibly fast data access times, quick program load times, and swift multitasking. Now even demanding applications will run smoother than ever—such as design tools, graphics-intensive 3D games, and 4K UHD video editing/rendering programs. Enjoy greater PC performance with a single spacious SSD.\*

\*When compared to an environment using a combination of an HDD as a storage drive and an SSD as a boot drive.

- 512GB Storage Capacity
- SATA III 6 Gb/s Interface
- 2.5" Form Factor
- Up to 550 MB/s Sequential Read Speed
- Up to 520 MB/s Sequential Write Speed
- AES 256-Bit Hardware-Based Encryption
- V-NAND Technology

Application:	Client PCs
Capacity:	512GB
Interface:	SATA 6 Gb/s Interface, compatible with SATA 3 Gb/s & SATA 1.5 Gb/s interface
Dimension:	100 X 69.85 X 6.8 (mm)

Weight:	Max 62.0g Weight
Storage Memory:	Samsung V-NAND 2-bit MLC
Controller:	Samsung MJX Controller
Cache Memory:	2GB LPDDR4 (2TB)
Sequential Read / Write:	Max. 560 MB/s / 530 MB/s
Random Read/Write (4KB, QD32):	Max. 100K IOPS / 90K IOPS
Random Read/Write (4KB, QD1):	Max. 11K IOPS / 43K IOPS
Special Features:	TRIM & S.M.A.R.T & World Wide Name & Device Sleep Mode Support
GC (Garbage Collection):	Auto Carbage Collection Algorithm
Data Encryption:	Class 0 (AES 256) TCG/Opal v2.0, MS eDrive (IEEE1667)
Average Power Consumption:	Active Read/Write: Max. 4.5 W / Avg. 2.2 W (4TB) Idle: Max. 0.5 W (4TB) Device Sleep: 7 mW (4TB)
Allowable Voltage:	5V $\pm$ 5% Allowable voltage
Reliability (MTBF):	1.5 Million Hours Reliability (MTBF)
Operating Temperature:	0 - 70 °C Operating Temperature
Shock:	1,500 G & 0.5 ms (Half sine)