

840 PRO Series Solid State Hard Drive

Samsung PC Memory

PRODUCT HIGHLIGHTS

- Industry-leading performance for professionals.
- Increased reliability and security.
- Precision engineering from the #1 memory supplier in the world.



MODEL NAME	UPC	CAPACITY	KIT TYPE	SEQUENTIAL READ SPEED*	SEQUENTIAL WRITE SPEED*	RANDOM READ SPEED (IOPS)*	RANDOM WRITE SPEED (IOPS)*
MZ-7PD128BW	8-87276-00116-6	128GB	Basic Drive	530MB/s	390MB/s	97,000	90,000
MZ-7PD128Z	8-87276-00112-8	128GB					
MZ-7PD256BW	8-87276-00117-3	256GB		540MB/s	520MB/s	100,000	
MZ-7PD256Z	8-87276-00113-5	256GB					
MZ-7PD512BW	8-87276-00118-0	512GB					
MZ-7PD512Z	8-87276-00114-2	512GB					

BLAZING SPEEDS THAT KEEP UP WITH THE HEAVIEST OF WORKLOADS.

The Samsung SSD 840 PRO is a high-performance SSD designed for power users. Capable of delivering up to 100,000 IOPS random read speed and 540MB/s sequential read speed, it is an SSD of unrivaled high performance. Even better, the advanced MDX controller delivers these speeds regardless of data type, unlike some competing controllers that greatly favor compressible data.

INCREASED PERFORMANCE IN RELIABILITY AND SECURITY.

As the world's #1 DRAM, NAND Flash and SSD supplier, Samsung has unique, industry-leading engineering resources, technologies and manufacturing processes as well as more stringent quality and testing standards. All Samsung SSDs are designed and built

completely in-house, rather than sourcing generic parts from the market. The Samsung SSD 840 Series is optimized for exceptional, sustained performance and unrivaled reliability through its specially engineered wear-leveling and garbage-collection algorithms and is backed by a generous 5-year limited warranty.

PRECISION ENGINEERING FROM THE #1 DRAM, NAND FLASH AND SSD SUPPLIER.

The Samsung SSD 840 PRO provides the same excellent performance throughout its entire lifetime and under extremely heavy workloads. In fact, the sophisticated MDX controller is capable of maintaining peak performance under punishing conditions for more than twice as long as the nearest competitor.

*Maximum based on system configuration and data type.



Solid State Hard Drive

TYPE

- 2.5" SATA III (6 Gb/s)
- Also compatible with SATA II (3 Gb/s) and SATA I (1.5 Gb/s)

NAND FLASH

- 2y nm Samsung Toggle DDR MLC NAND Flash Memory

PRODUCT DIMENSIONS (HxWxL)

- 0.28 x 2.75 x 3.94 inches
Only 7 mm thick to accommodate ultraportables and netbooks

PRODUCT WEIGHT

- 128GB: Max 0.13 lbs
- 256GB/512GB: Max 0.14 lbs

SOFTWARE

- Samsung SSD Magician 4.0 (featuring User-Configurable Overprovisioning, SecureErase and S.M.A.R.T. Drive Analysis)
- Simple Data Migration
- Performance Benchmark + Software Optimization

SOFTWARE COMPATIBILITY

- Windows 7 (32-bit and 64-bit)
- Vista (SP1 and above)
- XP (SP2 and above)
- Windows Server 2008 (32-bit and 64-bit)
- Windows Server 2003 (32-bit and 64-bit with SP2 and above)
- Windows 8 (32-bit and 64-bit)
- Mac OSX
- Linux

STANDARD OPERATING VOLTAGE

- 5V $\pm$ 5%

POWER CONSUMPTION (ACTIVE)

- 0.069W

POWER CONSUMPTION (IDLE)

- 0.054W

VIBRATION

- Operating: 2.17 Grms (7–800Hz)
- Non-operating: 3.08 Grms (7–800Hz)

SHOCK

- 1500G & 0.5ms (Half sine)

TRIM SUPPORT

- Yes (with supported OS)

RAID SUPPORT

- Yes (with RAID Controller)

ANNUALIZED FAILURE RATE (AFR)

- 0.16% (Consumer)
- 0.58% (Enterprise)

ENCRYPTION

- 256-bit AES Full-Disk Encryption (FDE)

ADDITIONAL FEATURES

- Worldwide Name (WWN)
- LED Indicator Support

TEMPERATURE

- 32°F to 140°F (Operating)

HUMIDITY

- 5% to 95%, non-condensing

US TRADE AGREEMENT ACT (TAA) COMPLIANT

- Yes

COUNTRY OF MANUFACTURE

- South Korea

WARRANTY

- 5 Years

TECH SUPPORT

- 1-800-SAMSUNG (1-800-726-7864)

The Samsung logo, consisting of the word "SAMSUNG" in white, bold, sans-serif capital letters, centered within a blue oval background.