840 Series Solid State Hard Drive

Samsung PC Memory

PRODUCT HIGHLIGHTS

- A whole new level of speed.
- A whole new level of reliability.
- A whole new level of simplicity.



| MODEL NAME | UPC | CAPACITY | KIT TYPE | SEQUENTIAL READ SPEED* | SEQUENTIAL WRITE SPEED* | RANDOM READ SPEED (IOPS)* | RANDOM WRITE SPEED (IOPS)* |
|-------------|-----------------|----------|----------------------------------|---------------------------|----------------------------|------------------------------|-------------------------------|
| MZ-7TD120BW | 8-87276-00663-5 | 120GB | Basic Drive | 530MB/s | 130MB/s | 85,000 | 32,000 |
| MZ-7TD120KW | 8-87276-00666-6 | 120GB | Full Kit (Desktop and Laptop) | 530MB/s | 130MB/s | 85,000 | 32,000 |
| MZ-7TD250BW | 8-87276-00664-2 | 250GB | Basic Drive | 540MB/s | 240MB/s | 95,000 | 44,000 |
| MZ-7TD250KW | 8-87276-00667-3 | 250GB | Full Kit (Desktop and Laptop) | 540MB/s | 240MB/s | 95,000 | 44,000 |
| MZ-7TD500BW | 8-87276-00665-9 | 500GB | Basic Drive | 540MB/s | 330MB/s | 97,000 | 63,000 |
| MZ-7TD500KW | 8-87276-00668-0 | 500GB | Full Kit (Desktop and Laptop) | 540MB/s | 330MB/s | 97,000 | 63,000 |

A WHOLE NEW LEVEL OF SPEED.

With its simple 3-step migration solution and industry-leading IOPS performance, the Samsung SSD 840 Series is the single best upgrade you can make for your PC.

Samsung's new Smart Data Migration software takes the guesswork and headache out of moving your operating system and precious data to your new SSD. And, once you're up and running, the 840 Series' amazing IOPS speeds empower you to multitask like never before possible.

A WHOLE NEW LEVEL OF RELIABILITY.

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 3-year limited warranty.

A WHOLE NEW LEVEL OF PERFORMANCE.

An innovative lightweight design that allows you to work smarter and play longer. No moving parts means no hard spin-ups, no noise and superior data protection. With industry-leading energy efficiency, battery life is up to 50 minutes longer versus standard HDD drives. Weighing only 2 oz., it makes laptops lighter and is the first SSD to support Device Sleep mode for Windows 8 / Haswell chipsets.

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 TLC 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

- 120GB: Max 0.13 lbs
- 250GB/500GB: 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)
- Mac OSX
- Linux

STANDARD OPERATING VOLTAGE

 \bullet 5V \pm 5%

POWER CONSUMPTION (ACTIVE)

• 0.071W

POWER CONSUMPTION (IDLE)

• 0.078W

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)

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

• 3 Years

TECH SUPPORT

• 1-800-SAMSUNG (1-800-726-7864)

