

# Samsung 750 EVO SSD

Bring heightened performance, reliability and security to PC storage.



## Elevate the computing experience with a fast, reliable SSD

Businesses are looking for faster, more reliable SSDs for accelerated program loading and instant responsiveness to improve work efficiency. The Samsung 750 EVO offers both and more.

### Highlights

- **Performance** : TurboWrite technology and RAPID mode for ultrafast computing
- **Reliability** : NAND flash-based, lightweight, shock and vibration resistant for working on the go
- **Security** : Encryption and Secure Erase for superb data protection
- **Ease of use** : Samsung Data Migration and Magician software for easy installation and management

## Boost productivity with ultrafast computing speeds

The Samsung 750 EVO boasts a fast random read/write (R/W) performance of up to 97K/88K Input/Output Operations Per Second (IOPS)\*. Plus, TurboWrite technology dramatically boosts the sequential R/W speeds up to 540/520 MB/s. The RAPID mode provides the option to heighten performance on demand by using free PC memory (DRAM) as a cache, enabling ultrafast multitasking for improved operational efficiency and workplace productivity.

\* 250 GB performance

## Work worry-free anywhere with solid reliability

With no moving parts, the NAND flash-based 750 EVO provides superb durability and is lightweight, making it

the ideal choice for working on the go. It is also shock and vibration resistant for worry-free operation. Guaranteeing up to 70 Terabytes Written (TBW) or up to 3 years\* with 1.5 million Mean Time Between Failures (MTBF), the 750 EVO provides outstanding reliability.

\* 3 years or TBW (120 GB: 35 TBW, 250 GB: 70 TBW), whichever comes first.

## Secure priceless data with advanced data encryption

Data security is of the utmost importance for businesses and the 750 EVO ensures it remains safe with Samsung SED<sup>1</sup> technology. An AES 256-bit hardware-based full disk encryption engine secures data with significantly less performance degradation. Plus, the 750 EVO is compliant with TCG<sup>2</sup> Opal v2.0 standards and the eDrive (IEEE<sup>3</sup> 1667) protocol.

1. Self-Encrypting Drive

2. Trusted Computing Group™

3. Institute of Electrical and Electronics Engineers®

## Install and manage the 750 EVO with ease

The 2.5-inch form factor and 7 mm height of the 750 EVO is optimized to upgrade desktops and slim laptops, and includes software for simple installation and management. Samsung Data Migration software features robust custom cloning that ensures seamless migration, even if the source data is greater than the capacity of the SSD. Plus, the Samsung Magician software simplifies SSD management, enabling businesses to maximize both the performance and the lifespan of the SSD, and facilitates data security features, including Secure Erase.

# Technical Specifications

	Samsung SSD 750 EVO
Usage Application	Client PCs
Capacity	120 GB, 250 GB
Dimensions (LxWxH)	100 x 69.85 x 6.8 mm
Interface	SATA 6 Gb/s (compatible with SATA 3 Gb/s and SATA 1.5 Gb/s)
Form Factor	2.5 inch
Controller	Samsung MGX controller
NAND Flash Memory	Samsung NAND Flash Memory
Flash	256 MB DDR3
Performance <sup>1</sup>	Sequential Read : Max. 540 MB/s
	Sequential Write <sup>2</sup> : Max. 520 MB/s
	4 KB Random Read (QD1) : Max. 10,000 IOPS
	4 KB Random Write (QD1) : Max. 35,000 IOPS
	4 KB Random Read (QD32) : Max. 94,000 IOPS (120GB) / Max. 97,000 IOPS (250GB)
	4 KB Random Write (QD32) : Max. 88,000 IOPS
Data Security	AES 256-bit Full Disk Encryption (FDE) TCG/Opal v2.0, Encrypted Drive (IEEE1667)
Weight	Max. 45 g
Power Consumption <sup>3</sup>	Active Read/Write (Average) : 2.4 W / 2.8 W Idle : 50 mW Device Sleep : 6 mW
Supporting features	TRIM (Required OS support), Garbage Collection, S.M.A.R.T
Temperature	Operating : 0°C to 70°C Non-Operating : -40°C to 85°C
Humidity	5% to 95%, non-condensing
Vibration	Non-Operating : 20~2000 Hz, 20 G
Shock	Non-Operating : 1,500 G, duration 0.5 m sec, 3 axis
Reliability	MTBF : 1.5 million hours
TBW	120 GB : 35 TBW / 250 GB : 70 TBW
Warranty	3 years limited

1. Sequential performance measurements based on CrystalDiskMark v.3.0.3. Random performance measurements based on Iometer 1.1.0. Performance may vary based on SSD's firmware version, system hardware & configuration. Test system configuration : Intel® Core i7-4790K @ 4.0GHz, DDR3 1600MHz 8 GB, OS : Windows® 7 Ultimate x64 SP1, IRST 13.0.3.1001, Chipset : Intel Z97PRO
2. Sequential Write performance measurements based on TurboWrite technology
3. Power consumption measured with Iometer 1.1.0 with Intel i7-4770K, DDR3 8 GB, Intel DH87RL OS : Windows 7 Ultimate x64 SP1



## Product Lineup

Density	Model Name	Model Code
120 GB	MZ-750120	MZ-750120BW, MZ-750120B/CN
250 GB	MZ-750250	MZ-750250BW, MZ-750250B/CN

## Legal and additional information

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### For more information

For more information about Samsung SSDs, visit [www.samsung.com/ssd](http://www.samsung.com/ssd) or [www.samsung.com/samsungssd](http://www.samsung.com/samsungssd).

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