



SAMSUNG PM830 SOLID STATE DRIVE

2.5" & mSATA 6.0Gb/s Mobile/Client Edition

Samsung stays a step ahead in technology, delivering multiple top-tier SSDs, for mobile, gaming, ultrabooks, and notebooks applications, with improved performance, enabling increased productivity and data protection.

Superior Endurance and 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 PM830 Mobile/Client Edition uses 20nm-class MLC NAND Flash and the latest MCX controller delivering superior endurance (up to 60 to 1250 TBW) and enabling the upmost reliability and unmatched quality.

Industry-leading Design

The Samsung PM830 Mobile/Client Edition features stunning design and precision engineering—inside and out. It measures from 7mm down to 3.8mm in thickness (smaller than a credit card), enabling easy adoption for installing into ultrabooks, notebooks, video recorders, etc.

Outstanding Performance in PC Applications

Samsung's PM830 Mobile/Client Edition deliver superior sequential reads (up to 500 MB/s), and fast sequential write speeds (up to 400 MB/s). It's the ideal solution for read-intensive workloads, such as multi-tasking between several programs simultaneously, high-performance gaming, and the like.

Increased Capacity and Security

The Samsung PM830 Mobile/Client Edition is available in a variety of capacities, including 32, 64, 128, 256, and 512GB, and ensures the all sensitive data is secure. Samsung's PM830 protects your data with AES 256-bit encryption, eliminating any concerns, confusion and uncertainties.

Key Benefits

- Samsung 3-core controller
- Samsung 20nm-class Toggle DDR NAND Flash memory
- Samsung 256MB DDR2 SDRAM cache memory
- Endurance up to 60 TBW to 1250 TBW
- For easy adoption, variety of physical dimensions from 7mm down to 3.8mm thickness

SAMSUNG PM830 TECHNICAL SPECIFICATIONS

High-Read Environments

Form Factor	2.5 inches	mSATA
Capacity (GB)	64, 128, 256, 512	32, 64, 128, 256
Host Interface	SATA Gen 3.0–6Gb/s	
Flash	MLC 20nm-class	
Encryption	AES-256	
MTBF	1.5 mm hours	1 mm hours
Uncorrectable Bit Error Rate (UBER)	1 in 10^{15}	
Power Consumption	Active: 0.127W Idle: 0.078W	
Write Endurance (Terabytes Written)	Up to 60–1250TBW	Up to 30–625TBW
Peak Sequential Performance	Read: 500 MB/s Write: 400 MB/s	
Peak Random Performance	Read: 80,000 IOPS Write: 36,000 IOPS	Read: 50,000 IOPS Write: 29,000 IOPS
Physical Dimensions	100 x 69.85 x 7mm	50.95 x 30 x 3.8mm
Weight	61g–62.5g	9–10g



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