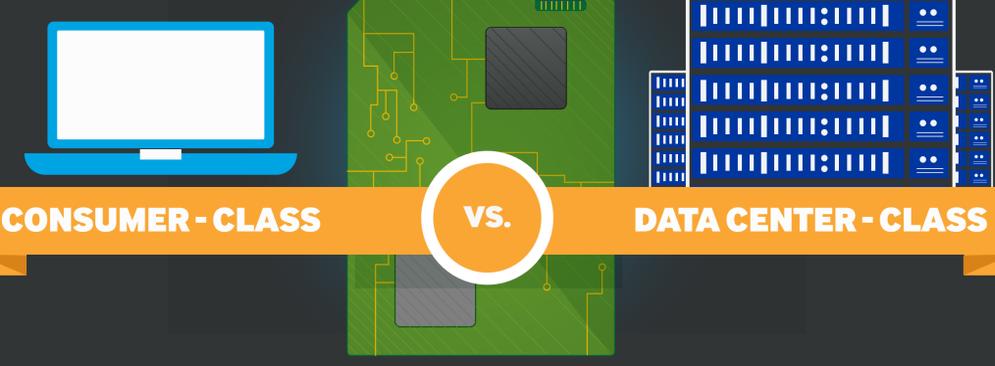


SOLID STATE DRIVES



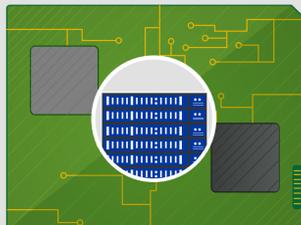
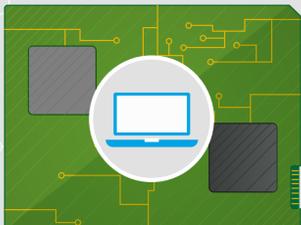
Which is right for your organization?

Known for their durability, reliability and lightning-fast transactional performance, solid state drives (SSDs) are increasingly being integrated into organizations' data management strategies. But not all SSDs are created equal.

Some are consumer-grade, and others are designed specifically for use in data centers. Read on to learn the distinctions between them, and why you should consider investing in data center-class SSDs to protect your high-value data.

Engineered for vastly different performance demands

Consumer-class SSDs are designed primarily as replacements for hard disk drives (HDDs) in PCs and are intended for more sporadic use. On the other hand, data center-class SSDs are built to sustain rapid, 24/7 responsiveness. Which type of SSD is right for your environment?



Consumer-class



Latency increases as workloads increase



Generally sit idle, and are built for peak performance with short bursts of speed



Significantly lower mixed workload capabilities

Data center-class



Lower latency



Designed for sustained performance



Mixed workload I/O



Reduced power consumption



Built-in power-loss protection



Consistent input/output operations

Data protection efficiency capabilities vary widely

Data corruption and loss caused by power outages or overheating can halt business operations. Data centers are most at-risk for these events, but data center SSDs are specifically designed to provide greater data protection.

Consumer-class



Increased risk of data loss or corruption during OS crashes, power failures, and overheating



Not designed for 24/7 operation and will drop performance during extended write operations



Overprovisioning to gain consistent performance creates inefficiency, drives up costs

Data center-class



Lower power consumption, and higher endurance with V-NAND



Designed to complete write operations if power is interrupted



Engineered for years of endurance

Built for data center demands

SAMSUNG PM863 & SM863 SSDs

An SSD that suffers data errors or fails entirely can put your business operations at risk. Samsung PM863 & SM863 SSDs provide superior performance, protection, efficiency and reliability for managing your business-critical data and meeting the exacting performance demands of today's data center.

SAMSUNG PM863 SERIES SSD



Designed for read-intensive applications

Random read speeds up to 99,000 IOPS

Sequential read speeds of up to 540 MB/s

SAMSUNG SM863 SERIES SSD



Designed for write-intensive applications

Up to 3 DWPD (Drive Writes Per Day)

Sequential write speeds of up to 485 MB/s

BOTH DELIVER:

Innovative Samsung V-NAND architecture

Low latency and consistent IOPS

Built-in power-loss protection

End-to-end protection against data loss

Energy efficiency with 3-core controllers

Solid reliability with sustained high performance under heavy use

Increase performance and reliability with Samsung Enterprise SSDs

Samsung's PM863 and SM863 Series SSDs deliver exceptional performance, outstanding reliability and end-to-end integration, with 100% Samsung-manufactured components.

[Learn more](#)

SAMSUNG

All comparisons are based on Samsung performance metrics for Samsung client PC class SSDs and the PM863/SM863 enterprise class SSDs.