

MICRON® M500DC SATA SSD

SATA

1.8"

2.5"



The Perfect Fit for Data Centers

Meet the 24/7 demands of data center appliances and enterprise storage applications that require 1 to 3 drive fills per day with the M500DC SATA enterprise SSD. The M500DC's rich features and optimized endurance, as well as ensured quality of service over random workloads, is the perfect fit for data centers that need greater data throughput.

The M500DC uses Micron's extended performance and enhanced reliability technology (XPERT) features to help ensure data integrity, extend drive life, and optimize performance. The M500DC also offers the option of TCG Enterprise-level data encryption to maximize data security without sacrificing performance.

KEY BENEFITS

Low Total Cost of Ownership

Consume significantly less power than with HDDs and lower overall storage costs.

Enhanced Performance

Reduce bottlenecks and maximize throughput with accelerated random read/write capability.

High Reliability, Quality and TCG Enterprise Encryption

Protect mission-critical data with a drive that features hardware-based encryption and has been purpose-built by a trusted NAND manufacturer and validated by key OEMs.

Optimized Endurance

Achieve 1 to 3 drive fills per day over 5 years, reducing the need to replace drives more frequently.

XPERT Firmware Features

Provides architectural enhancements, including data path protection, encryption, adaptive thermal monitoring and power loss protection, that are designed to greatly improve SSD performance, drive life and reliability.

WHICH APPLICATIONS ARE THE BEST FIT?



BIG DATA

★★★★



CONTENT DELIVERY

★★★★



DATABASE MANAGEMENT

★★



VIRTUALIZED ENVIRONMENTS

★★



HIGH-PERFORMANCE COMPUTING

★

Feature-rich M500DC SSD with enhanced performance and reliability delivers more value to your enterprise applications.

★ GOOD ★★ BETTER ★★★ BEST

M500DC Performance you can trust



ADVANTAGES OF TCG ENTERPRISE HARDWARE ENCRYPTION

Data Security

A superior level of protection is possible because data encryption and user authentication are performed on the drive itself, independent of the operating system, memory, and BIOS.

Data Breach Protection

The threat of massive data breaches, theft, and loss can be virtually eliminated from data centers.

Performance

Maximum system performance is achieved because the CPU and memory overhead aren't impacted.

Ease of Use

The seamless and transparent implementation doesn't interfere with the user's workflow.

Cost Savings

Performing key management in hardware is less costly to implement and maintain than software encryption.

Compliance

Conforming to industry standards and government data security regulations ensures a high level of protection.



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Key Specifications		
	1.8-Inch	2.5-Inch
Capacity ¹	120GB, 240GB, 480GB, 800GB	
Interface	SATA 6 Gb/s	
Sequential read/write performance ²	120GB: 425/200 MB/s 240GB: 425/330 MB/s 480GB: 425/375 MB/s 800GB: 425/375 MB/s	
Random read/write performance ³	120GB: 63,000/23,000 IOPS 240GB: 63,000/33,000 IOPS 480GB: 63,000/35,000 IOPS 800GB: 65,000/24,000 IOPS	
READ/WRITE latency	0.5ms/1.5ms	
Active power consumption	120GB, 240GB, 480GB: <6.0W (TYP) 800GB: <6.3W (TYP)	
Idle power consumption	1.2W	
Operating temp	0°C to 70°C	
Dimensions	78.5 x 54 x 5mm	100.2 x 69.85 x 7mm
Weight	<55g	<90g
Extended Features	eXtended Performance and Enhanced Reliability Technology (XPRT) suite of enterprise performance and advanced data protection algorithms	

1. Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.
2. 128KB transfer size, steady state.
3. 4KB transfer size, steady state.

Base Part Numbers		
Standard Part	Capacity	Form Factor
MTFDDAA120MBB-2AE1ZABYY	120GB	1.8-inch
MTFDDAA240MBB-2AE1ZABYY	240GB	1.8-inch
MTFDDAA480MBB-2AE1ZABYY	480GB	1.8-inch
MTFDDAA800MBB-2AE1ZABYY	800GB	1.8-inch
MTFDDAK120MBB-2AE1ZABYY	120GB	2.5-inch
MTFDDAK240MBB-2AE1ZABYY	240GB	2.5-inch
MTFDDAK480MBB-2AE1ZABYY	480GB	2.5-inch
MTFDDAK800MBB-2AE1ZABYY	800GB	2.5-inch
TCG Enterprise Part	Capacity	Form Factor
MTFDDAA120MBB-2AE16ABYY	120GB	1.8-inch
MTFDDAA240MBB-2AE16ABYY	240GB	1.8-inch
MTFDDAA480MBB-2AE16ABYY	480GB	1.8-inch
MTFDDAA800MBB-2AE16ABYY	800GB	1.8-inch
MTFDDAK120MBB-1AE16ABYY	120GB	2.5-inch
MTFDDAK240MBB-1AE16ABYY	240GB	2.5-inch
MTFDDAK480MBB-1AE16ABYY	480GB	2.5-inch
MTFDDAK800MBB-1AE16ABYY	800GB	2.5-inch