KIOXIA

End of Sales

KIOXIA PM6-M Series (2.5-inch)

(KPM61MUG/KPM6XMUG/KPM6VMUG/KPM6WMUG)

Enterprise SAS Write Intensive SSD

KIOXIA PM6-M Series 24G SAS Enterprise SSD is optimized for write intensive applications, including online transaction processing (OLTP) and e-commerce. The series is designed to deliver high levels of performance, quality and reliability for mission critical, hyperscale and virtualized environments.

Featuring KIOXIA Corporation's 96-layer BiCS FLASH™ 3D flash memory, this 6th generation enterprise SAS SSD PM6-M Series offers 10 DWPD (Drive Writes Per Day) with capacities up to 3.2 TB.

Product image may represent a design model.

Key Features

- 24G SAS interface with single/dual-port support
- Capacities from 400 GB to 3.2 TB
- Up to 595K random read IOPS (4 KiB) in dual-port mode
- 2.5-inch form factor, 15 mm thickness
- 10 DWPD with 100 % Random Write Workload
- Power Loss Protection and End-to-End Data Protection, including T10 DIF
- Security options: SIE, SED, FIPS SED[1][2][3][4][5]
- 5-year limited warranty

Key Applications

- Mission critical enterprise workloads
- Hyperscale and virtualized environments
- Online transaction processing (OLTP)
- E-commerce

Specifications

Base Model Number	KPM61MUG3T20	KPM61MUG1T60	KPM61MUG800G	KPM61MUG400G
SIE Model Number	KPM6XMUG3T20	KPM6XMUG1T60	KPM6XMUG800G	KPM6XMUG400G
SED Model Number	KPM6VMUG3T20	KPM6VMUG1T60	KPM6VMUG800G	KPM6VMUG400G
FIPS SED Model Number	KPM6WMUG3T20	KPM6WMUG1T60	KPM6WMUG800G	KPM6WMUG400G
Capacity	3,200 GB	1,600 GB	800 GB	400 GB
Basic Specifications				
Form Factor	2.5-inch, 15 mm thickness			
Interface	SAS-4			
Interface Speed	22.5 Gbit/s, 12.0 Gbit/s, 6.0 Gbit/s, 3.0 Gbit/s, 1.5 Gbit/s			
Flash Memory Type	BiCS FLASH™ TLC			

Copyright © 2022-2025 KIOXIA Corporation. All rights reserved.

Specifications (Continued)

Capacity	3,200 GB	1,600 GB	800 GB	400 GB
Performance (Up to)				
Sustained 128 KiB Sequential Read	4,150 MB/s			
Sustained 128 KiB Sequential Write	3,700 MB/s	2,450 MB/s	2,700 MB/s	1,450 MB/s
Sustained 4 KiB Random Read	595K IOPS			
Sustained 4 KiB Random Write	460K IOPS	452K IOPS	466K IOPS	300K IOPS
Power Requirements				
Supply Voltage	12 V ± 10 %, 5 V +10 % / -7 %			
Power Consumption (Ready)	5 W typ.			
Reliability				
MTTF	2,500,000 hours			
Warranty	5 years			
DWPD	10			
Dimensions				
Thickness	15.0 mm +0 / -0.5 mm			
Width	69.85 mm ± 0.25 mm			
Length	100.45 mm Max			
Weight	130 g Max			
Environmental				
Temperature (Operating)	0 °C to 70 °C			
Temperature (Non-operating)	-40 °C to 80 °C			
Humidity (Operating)	5 % to 95 % R.H.			
Vibration (Operating)	21.27 m/s^2 { 2.17 Grms } (5 to 800 Hz)			
Shock (Operating)	9.8 km/s^2 { 1,000 G } (0.5 ms)			

Definition of capacity: KIOXIA Corporation defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1 GB = 2^30 = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

GT/s: Giga Transfers per second.

A kibibyte (KiB) means 2^10, or 1,024 bytes.

MTTF (Mean Time to Failure) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF.

DWPD: Drive Writes Per Day. One full drive write per day means the drive can be written and re-written to full capacity once a day every day for the specified lifetime. Actual results may vary due to system configuration, usage and other factors.

Read and write speed may vary depending on various factors such as host devices, software (drivers, OS etc.), and read/write conditions.

IOPS: Input Output Per Second (or the number of I/O operations per second).

[1] Sanitize Instant Erase (SIE), Self-Encrypting Drive (SED) and FIPS (Federal Information Processing Standards) SED security optional models are available.

[2] SIE optional model supports Crypto Erase, which is a standardized feature defined by the technical committees (T10) of INCITS (the InterNational Committee for Information Technology Standards).

[3] SED optional model supports TCG Enterprise SSC.

[4] FIPS SED optional model utilizes a security module designed to comply with FIPS 140-2 and FIPS 140-3, which define security requirements for cryptographic module by NIST (National Institute of Standards and Technology). For the latest validation status, please make inquiries through "Contact us" in each region's website, https://www.kioxia.com/.

[5] Security optional models are not available in all countries due to export and local regulations.

Other company names, product names, and service names may be trademarks of third-party companies.

Copyright © 2022-2025 KIOXIA Corporation. All rights reserved.