KIOXIA

End of Sales

KIOXIA PM6-V Series (2.5-inch)

(KPM61VUG/KPM6XVUG/KPM6VVUG/KPM6WVUG)

Enterprise SAS Mixed Use SSD

KIOXIA PM6-V Series 24G SAS Enterprise SSD is optimized for mixed use applications, including relational database, streaming media, data warehousing and web services. The series is designed to deliver balanced levels of performance, reliability, capacity and endurance for mixed use and read intensive environments.

Featuring KIOXIA Corporation's 96-layer BiCS FLASH™ 3D flash memory, this 6th generation enterprise SAS SSD PM6-V offers 3 DWPD (Drive Writes Per Day) with capacities up to 12.8 TB.

Product image may represent a design model.

Key Features

- 24G SAS interface with single/dual-port support
- Capacities from 800 GB to 12.8 TB
- Up to 595K random read IOPS (4 KiB) in dual-port mode
- 2.5-inch form factor, 15 mm thickness
- 3 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

- Web servers
- Data warehousing
- Streaming media

Specifications

Base Model Number	KPM61VUG12T8	KPM61VUG6T40	KPM61VUG3T20	KPM61VUG1T60	KPM61VUG800G
SIE Model Number	KPM6XVUG12T8	KPM6XVUG6T40	KPM6XVUG3T20	KPM6XVUG1T60	KPM6XVUG800G
SED Model Number	KPM6VVUG12T8	KPM6VVUG6T40	KPM6VVUG3T20	KPM6VVUG1T60	KPM6VVUG800G
FIPS SED Model Number	KPM6WVUG12T8	KPM6WVUG6T40	KPM6WVUG3T20	KPM6WVUG1T60	KPM6WVUG800G
Capacity	12,800 GB	6,400 GB	3,200 GB	1,600 GB	800 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				

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Specifications (Continued)

Capacity	12,800 GB	6,400 GB	3,200 GB	1,600 GB	800 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	305K IOPS	290K IOPS	240K IOPS	265K IOPS	145K 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	3				
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.

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