

## > PX05SLB SERIES ENTERPRISE READ INTENSIVE SSD

The PX05S Series is our 4th generation enterprise SAS SSD leveraging the highly successful PX04S Series. The PX05SL Series is designed for very read-intensive application workloads including web servers, data warehousing, media streaming and VOD and offers large capacities up to 4TB with 12.0 Gbit/s SAS interface.

The series' 270K IOPS sustained random read performance and 1,400 - 1,800 MB/s sequential read performance helps very read-intensive application workloads to realize superior results and assists organizations in minimizing total cost of ownership while maintaining high performance, reliability and endurance for maximum scalability.

Optimized for applications demanding 0.5 or less Drive Writes Per Day (DWPD), the family is equipped with unique customer-tunable feature allowing optimization for maximum performance or power efficiency. Additional features include power-loss protection and full data path protection. Each model supports pin-3 power disable for improved enclosure services control over storage media. Self-encrypting drive options with instant secure erase are also available



### > KEY FEATURES

- 2TB and 4TB Storage Capacity
- 12.0 Gbit/s Dual-Port SAS Interface
- 270K IOPS random read (4K) performance
- 0.5 DWPD with 100% Random Write Workload
- Power-Loss-Protection and End-to-End Data Protection including T10 DIF
- Pin-3 Power Disable Support
- Sanitize Instant Erase (SIE) Option
- Self-Encrypting (SED) Option
- Self-Encrypting (SED), FIPS Certified Option
- 5-year limited warranty

### > APPLICATIONS

- Data Warehousing
- Web Servers
- Media Streaming
- Video on Demand (VOD)

### > MAIN SPECIFICATIONS

Model Number		PX05SLB400	PX05SLB200
SIE Model Number		PX05SLB400Y	PX05SLB200Y
SED Model Number		PX05SLQ400	PX05SLQ200
SED FIPS Model Number		PX05SLQ400B	PX05SLQ200B
Interface		SAS-3.0	
Formatted Capacity		4,000 GB	2,000 GB
Performance	Interface Speed	12.0 Gbit/s , 6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s	
	Memory Type	MLC	
	Sustained 64KiB Sequential Read	1,400 MiB/s	1,800 MiB/s
	Sustained 64KiB Sequential Write	750 MiB/s	850 MiB/s
	Sustained 4KiB Random Read	270,000 IOPS	
	Sustained 4KiB Random Write	20,000 IOPS	
Supply Voltage	Allowable Voltage	5 V ± 7% 12 V ± 7 %	
Power Consumption		3.2 W Typ.	

## > RELIABILITY

Model Number	PX05SLBxxx PX05SLBxxxY PX05SLQxxx PX05SLQxxxB
MTTF	2,000,000 hours
DWPD	0.5
Warranty	5 years

## > MECHANICAL SPECIFICATIONS

Model Number	PX05SLBxxx PX05SLBxxxY PX05SLQxxx PX05SLQxxxB
Height	15.0 mm + 0, - 0.5 mm
Width	69.85 ± 0.25 mm
Length	100.45 mm Max.
Weight	150 g Max.

## > ENVIRONMENTAL LIMITS

Item	PX05SLBxxx PX05SLBxxxY PX05SLQxxx PX05SLQxxxB
Temperature	Operating 0 °C to 55 °C
Humidity	Operating 5 % to 95 % R.H. (No condensation)
Vibration	Operating 21.27 m/s <sup>2</sup> { 2.17 Grms } ( 5 to 800 Hz )
Shock	Operating 9,800 m/s <sup>2</sup> { 1,000 G } ( 0.5 ms duration )

Product image may represent a design model.

Definition of capacity: KIOXIA 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 1GB = 2<sup>30</sup> = 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, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

A kibibyte (KiB) means 2<sup>10</sup>, or 1,024 bytes, a mebibyte (MiB) means 2<sup>20</sup>, or 1,048,576 bytes, and a gibibyte (GiB) means 2<sup>30</sup>, or 1,073,741,824 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 Write 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 five years, the stated product warranty period. Actual results may vary due to system configuration, usage and other factors.

Read and write speed may vary depending on the host device, read and write conditions, and file size.

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

There are some models of KIOXIA Storage Products which deliver various security functions as optional feature. For more information of security options, please contact your KIOXIA sales representative