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Enterprise Storage
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PX02SM Series Solid State Drive

200 / 400 / 800 / 1600GB*
2.5-Inch / eMLC NAND /SAS

Toshiba's highest performance 2.5" Enterprise-Class Solid State Drive Architecture optimized for mission critical Tier-0 enterprise server & storage applications; features are highlighted by 6G/12G SAS along with industry standard self-encryption technology.

- 24nm eMLC NAND Process
- 12 Gb/sec SAS Interface & 6 Gb/sec SAS Interface
- Capacities up to 1.6TB*
- Quadruple Swing by Code, Layered ECC Approach for Improved Error Correction
- Power Loss Protection
- Security Models Available

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	PX02SMF020 PX02SMU020	PX02SMF040 PX02SMU040	PX02SMF080 PX02SMU080	PX02SMB160 PX02SMQ160
Security SANITIZE Cryptographic Erase				
Series Overview				
Drive Capacity	200GB*	400GB*	800GB*	1.6TB*
Physical Capacity	256GB*	512GB*	1,024GB*	2,048GB*
NAND Technology		24nm eMLC		
Drive Interface		SAS 6 Gb/sec / 12 Gb/sec, Dual port		
Sector Size		512B, 520B, 528B, 4096B, 4104B, 4160B & 4224B		
Performance				
Sequential Read (Sustained)		900 MB/s**		
Sequential Write (Sustained)		400 MB/s**		
4kB Random Read (Sustained)		120,000 IOPS**		
4kB Random Write (Sustained)		30,000 IOPS**		
Product Life		5 years		
Power Requirements				
Voltage		5V (+/- 5%), 12V (+/- 5%)		
Power Consumption		<9.0W (+12V + 5%)		
Energy Consumption Efficiency		13.4 kIOPS/W		
Physical Size				
Dimensions (W) x (D) x (H)	69.85 mm x 100 mm x 7.0 mm	69.85 mm x 100 mm x 7.0 mm	69.85 mm x 100 mm x 7.0 mm	69.85 mm x 100 mm x 15.0 mm
Weight		70 g		
Environmental				
Temp - Operating		0° to 55°C		
Temp - Non-Operating		-40° to 70°C (-40° to 158°F)		
Vibration - Operating		9.8 m/s^2 (1G)		
Vibration - Non-Operating		49 m/s^2 (5G)		
Shock - Operating		9,800 m/s^2 (1,000G 0.5ms, ½ sine)		
Shock - Non-Operating		9,800 m/s^2 (1,000G 0.5ms, ½ sine)		
Power Loss Protection		YES		
Reliability				
Availability (hrs/day x days/wk)		24 x 7		
Endurance - Total Bytes Written	3.7PB***	7.3PB***	14.6PB***	29.2PB***
Warranty				
Limited Warranty		5 years****		

*One Terabyte (1TB) = 1,000 Gigabytes (GB). One Gigabyte (1GB) means 10^9 = 1,000,000,000 bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2^{30} = 1,073,741,824 bytes, and therefore shows less storage capacity. Available storage capacity will also be less if the computer includes one or more pre-installed operating systems, pre-installed software applications, or media content. Actual formatted capacity may vary.

**4KB random reads and/or writes

***Warranty for the 200GB capacity point is 5 years or 3.7PB total write capacity, whichever occurs first. Warranty for the 400GB capacity point is 5 years or 7.3PB total write capacity, whichever occurs first. Warranty for the 800GB capacity point is 5 years or 14.6PB total write capacity, whichever occurs first. Warranty for the 1600GB capacity point is 5 years or 29.2PB total write capacity, whichever occurs first.

While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. Product image may represent design model.