

SAMSUNG

PM1725 NVMe PCIe SSD

Blazing fast speeds and ultra-low latency
for demanding enterprise systems



EXTREME PERFORMANCE FROM THE SSD TECHNOLOGY LEADER.

Maximize your data transmission with Samsung's high-performance, highly reliable PM1725 SSD.

Enterprise environments have unique requirements to ensure that they operate optimally 24/7, 365 days a year. Varied levels of performance with low latency is essential. It is also critical that these environments remain stable when processing various read and write workloads. And the most crucial criteria of all is protection from data corruption or loss due to unexpected power outages. Considering each of these factors, IT and data center managers are tasked with finding high performing and dependable memory solutions.

Samsung is well equipped to offer enterprise environments superb solid-state drives (SSDs) that deliver exceptional performance in multi-thread applications, such as compute and virtualization, relational databases and storage. These high-performing SSDs also deliver outstanding reliability for continual operation regardless of unanticipated power loss. Using their proven expertise and wealth of experience in cutting-edge SSD technology, Samsung memory solutions helps data centers operate continually at the highest performance levels. Samsung has the added advantage of being the sole manufacturer of all of its SSD components, ensuring end-to-end integration, quality assurance and the utmost compatibility.

MAXIMIZE YOUR DATA TRANSMISSION WITH SAMSUNG'S HIGH-PERFORMANCE, HIGHLY RELIABLE PM1725 SSD.

Samsung PM1725 SSD delivers:

- **Extreme performance** The highest levels with unsurpassed random read speeds and an ultra-low latency rate using Samsung's highly innovative 3D vertical-NAND (V-NAND) flash memory and an optimized controller.
- **Outstanding reliability** Features five DWPDs (drive writes per day) for five years, which translates to writing a total of 32TBs per day during that time. This means users can write 6,400 files of 5GB-equivalent data or video every day, which represents a level of reliability that's more than sufficient for enterprise storage systems that have to perform ultrafast transmission of large amounts of data.
- **High capacities** Depending on your storage requirements and applications, 800GB, 1.6TB, 3.2TB and 6.4TB capacities are available.

Realize extreme performance with ultra-low latency in read-intensive applications

To satisfy an enterprise environment's exceptionally high-demands, an SSD must perform over long periods of time at maximum performance levels for the variety of workloads that simultaneously access the device. In addition, the SSD must provide the performance consistency to satisfy grueling Quality of Service (QoS) requirements.

Delivering highly optimized performance for various data center applications

The Samsung PM1725 SSD is optimized to excel in virtually any data center scenario. This enterprise-level, ultra-high performance SSD provides unsurpassed random read performance and is particularly suitable for read-intensive data center applications.

When compared with the other standardized SSDs in Samsung's internal tests, the PM1725 SSD showed the highest random read IOPS performance.

Enterprise-grade power loss protection

During normal power-off periods, the host server allocates time to maintain data integrity by transmitting standby commands to each device. In the event of an unexpected power loss, though, the cached data in a storage device's internal buffers (DRAM) can be lost. This can occur with power outages or users unplugging devices from the system. However, the Samsung PM1725 M.2 SSD has been designed to prevent data loss with its power-loss protection architecture. Upon detection of an external power failure, the SSD immediately uses the stored energy from tantalum capacitors to provide enough time to transfer the cached data in DRAM to the flash memory, ensuring no loss of data.

SAMSUNG PM1725 NVMe SSD TECHNICAL SPECIFICATIONS

Form Factor	2.5"	HHHL
Capacity (GB)	800GB, 1.6TB, 3.2TB	3.2TB, 6.4TB
Host Interface	PCIe Gen3 x4	PCIe Gen3 x8
MTBF	2,000,000 hours	
Power Consumption (Active/Idle)	25W/7W	
Endurance	5 DWPD	
UBER	1 in 10 ¹⁷	
Sequential Read	Up to 3,100 MB/s	Up to 6,000 MB/s
Sequential Write	Up to 2,000 MB/s	
Random Read	Up to 750,000 IOPS	Up to 1,000,000 IOPS
Random Write	Up to 120,000 IOPS	
Physical Dimensions	69 x 100 x 14 mm	
Weight	140 grams	210 grams



For more information, visit: www.samsung.com/flash-ssd
For specific sales inquiries, contact us via email at: ssd@ssi.samsung.com



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