

Montreal E1.S SSD

Power and Space Efficient EDSFF SSD

Power Efficiency

Even at peak write performance, these E1.S SSDs consume 1/3 less power compared to standard E1.S with the same level of performance. In server systems where performance per Watt is crucial, this can significantly lower the power footprint.

Enterprise-Level QoS and Performance

Montreal drives feature QD1 latency of 89 μ s that will ensure that your drive is able to keep up with the high-performance processors in servers and datacenters. They have continuous Sequential Read and Write speeds of 3455MB/s and 1321MB/s for the 960GB E1.S SSD, as well as 4K Random Read and Write IOPS of 674K and 329K.

Security and Data Protection

Montreal features end-to-end data protection and SECDED on all memories. It also has the latest security features with TCG SED/Opal, providing confidence for use in any environment.

Endurance and PLP

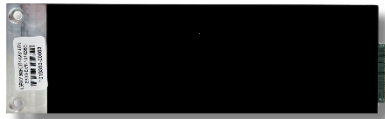
Featuring up to 1 DWPD using eTLC NAND, Montreal SSDs can also be configured for higher DWPD upon request. Additionally, PLP is a standard feature in enterprise-grade drives like these.

Capacities: 960GB, 1.92TB, 3.84TB, 7.68TB

With options ranging from 960GB to 7.68TB, Unigen's Montreal SSDs offer efficient storage solutions for a number of use cases and workloads.

Small Form Factor

Montreal E1.S drives are currently available in a 9.5mm enclosure format.



Unigen's Montreal SSDs deliver power efficiency, performance and quality-of-service (QoS) with advanced PCIe Gen4.0 NVMe™ 1.4 enterprise controllers. Achieving sequential read/write speeds of up to 3455/1321MB/s on the compact 960GB E1.S SSD, these drives offer high performance in a space efficient design. With up to 1 DWPD endurance across all configurations, these SSDs are designed for longevity and can meet the stringent power, performance, and thermal requirements of server and data center applications.

Specifications

	960GB	1.92TB	3.84TB	7.68TB
Interface	PCIe Gen 4.0	PCIe Gen 4.0	PCIe Gen 4.0	PCIe Gen 4.0
Form Factor	E1.S	E1.S	E1.S	E1.S
Capacity				
Total Capacity	960GB	1.92TB	3.84TB	7.68TB
Performance				
Sequential Reads (Seq 128K)	3455 MB/s	5750 MB/s	7079 MB/s	7112 MB/s
Sequential Writes (Seq 128K)	1321 MB/s	1748 MB/s	3121 MB/s	3026 MB/s
Random Reads (RND4K Q128/T4)	465 KIOPS	667 KIOPS	958 KIOPS	958 KIOPS
Random Writes (RND4K Q256/T4)	60 KIOPS	82.7 KIOPS	174 KIOPS	187 KIOPS
QoS				
4KB Random Read / Write Latency, 70/30, QD1, JOBS1	89 / 21us			
Latency 99% Random R/W 70/30, Block 256K, QD1, JOBS1	1319 / 95us			
Latency 99.9% Random R/W 70/30, Block 256K, QD1, JOBS1	1679 / 115 us			
Latency 99.99% Random R/W 70/30, Block 256K, QD1, JOBS1	2572 / 144 us			
Endurance				
Endurance	1.75 PBW	3.5 PBW	7 PBW	14 PBW
Reliability & Environment				
Mean Time Between Failure (MTBF in hrs)	2.5 million	2.5 million	2.5 million	2.5 million
Uncorrectable Bit Error Rate (UBER)	10 ⁻¹⁷	10 ⁻¹⁷	10 ⁻¹⁷	10 ⁻¹⁷
Temperature (Operating)	0 to 70 C	0 to 70 C	0 to 70 C	0 to 70 C
Power Max (Active)	6.1W	6.8W	11.5W	11.5W

pending qualification