DC1500M U.2 ENTERPRISE SSD
Gen 3.0 x4 PCIe NVME Storage for Mixed-Use Workloads

Kingston DC1500M U.2 NVMe SSD features high-storage capacity and enhanced enterprise performance. It offers a high-performance Gen 3.0 x4 PCIe NVMe design to deliver latency and IOPS consistency. DC1500M is backed by strict QoS requirements to ensure predictable random IO performance as well as predictable latencies over a wide range of workloads.

The U.2 form factor design (2.5”, 15mm) works seamlessly with the latest generation servers and storage arrays utilizing PCIe and U.2 backplanes. DC1500M is hot pluggable eliminating the challenges of serviceable PCIe storage.

It boasts enterprise-class features such as end-to-end data path protection, namespace management, power loss protection (PLP), and telemetry monitoring for increased data center reliability. Backed by Kingston’s legendary pre- and post-sales support and a five-year limited warranty6. Capacities range from 960GB to 7.6TB1.

Applications
The “mixed-use” workload drive makes it ideal for running a wide range of customer applications including:
• Virtualization
• High performance cloud service
• Web hosting caching
• High-resolution media capture and transport
• ERP, CRM, GL, OLAP, OLTP, ERM, BI, and EDW workloads

❯ Enterprise-class U.2 PCIe NVMe Gen 3.0 x4 SSD
❯ Exceptional speeds up to 36B/s
❯ Predictable low-latency and I/O consistency
❯ On-board Power Loss Protection (PLP)
FEATURES / BENEFITS

Data Center NVMe Performance — Incredible I/O consistency with sustained speeds of up to 3GB/s and 510K IOPS.

Enterprise-Class Mixed-Use Storage — An exceptional balance of consistent I/O delivery with high read and write IOPS performance to manage a wide range of transactional workloads.

SPECIFICATIONS

Form Factor
U.2, 2.5” x 15mm

Interface
PCIe NVMe Gen3 x4

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

NAND
3D TLC

Sequential Read/Write
960GB — 3,100MB/s/1,700MB/s  1.92TB — 3,300MB/s/2,700MB/s
3.84TB — 3,100MB/s/2,700MB/s  7.68TB — 3,100MB/s/2,700MB/s

Steady-State 4k Read/Write
960GB — 440,000/150,000 IOPS  1.92TB — 510,000/220,000 IOPS
3.84TB — 480,000/210,000 IOPS  7.68TB — 420,000/200,000 IOPS

Latency Quality of Service (QoS)
99.9 - Read/Write: <110 µs / <206 µs

Static and Dynamic Wear Leveling
Yes

Power Loss Protection (Power Caps)
Yes

Namespace Management Support
Yes - 64 Namespaces supported

Enterprise Diagnostics
Telemetry, Media Wear, Temperature, Health and Error Logs, etc

Endurance
960GB — 1681 TBW (1 DWPD/5yrs) (1.6 DWPD/3yrs)
1.92TB — 3362 TBW (1 DWPD/5yrs) (1.6 DWPD/3yrs)
3.84TB — 6725 TBW (1 DWPD/5yrs) (1.6 DWPD/3yrs)
7.68TB — 13450 TBW (1 DWPD/5yrs) (1.6 DWPD/3yrs)

Power Consumption
960GB — Idle: 6.30W  Average Read: 6.21W  Average Write: 11.40W
Max Read: 6.60W  Max Write: 12.24W
1.92TB — Idle: 6.60W  Average Read: 6.30W  Average Write: 13.7W
Max Read: 6.63W  Max Write: 15.36W
3.84TB — Idle: 6.8W  Average Read: 6.40W  Average Write: 14.20W
Max Read: 7W  Max Write: 16W
7.68TB — Idle: 7W  Average Read: 7.30W  Average Write: 17.14W
Max Read: 8.16W  Max Write: 20.88W

Operating temperature
0°C ~ 70°C

Reduce Application Latencies — Quality of Service (QoS) delivers ultra-low transactional latency for large data sets and various web-based applications.

On-board Power Loss Protection (PLP) — Enterprise-class protection to reduce possibility of data loss or corruption on ungraceful powerfails.