Enterprise-class SSD delivers outstanding performance and endurance.

Kingston's enterprise-class E100 solid-state drive is ideal for mission-critical environments such as datacenters, which need to be up and running 24 hours a day, 7 days a week. E100 combines impressive endurance and reliability with power fail support to ensure uninterrupted operation.

E100 offers 10X endurance over typical client SSDs, with 30K program/erase cycles on E100 vs. 3K program/erase cycles on client SSDs. It features a SF-2500 enterprise class processor, DuraWrite™ for maximum read/write performance and endurance and RAISE™ for advanced error correction.

E100's power fail support uses Tantalum capacitors so existing writes are committed and/or retired during a power loss to prevent any data loss. The capacitors can hold a charge at temperatures up to 85 degrees (other companies use SuperCaps which can hold a charge at temperatures up to 75 degrees). Additionally, the drive shuts down properly during unexpected power interruptions.

With read/write performance delays often associated with large data sets, E100 helps solve these IO latency bottlenecks in servers. It enables larger enterprise virtualization projects by increasing the number of virtual systems supported using the existing hardware infrastructure.

E100 is backed by a three-year warranty and legendary Kingston® reliability.

> Boost performance, productivity and endurance
> Power Fail support for data integrity protection on critical server applications

SSD*Now* E100

FEATURES/BENEFITS

> **Performance** — higher IOPS for multi-user environments
> **Endurance** — Data Integrity Protection featuring DuraClass™ Technology
> **Dependable** — RAISE™ for advanced data reliability
> **Secure** — self-encrypting drive
> **Durable** — DuraWrite optimizes writes to extend endurance
> **Warranty/support** — three-year warranty with free technical support
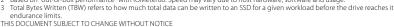
SPECIFICATIONS

> **Form factor** 2.5"
> **Interface** SATA Rev. 3.0 (6Gb/s), SATA Rev. 2.0 (3Gb/s), SATA Rev. 1.0 (1.5Gb/s)
> **Capacities[1]** 100GB, 200GB, 400GB
> **Sequential Reads[2]**
>   SATA Rev. 3.0 — 100GB, 200GB, & 400GB - 535MB/s
>   SATA Rev. 2.0 — 100GB, 200GB, & 400GB - 270MB/s
> **Sequential Writes[2]**
>   SATA Rev. 3.0 — 100GB, 200GB, & 400GB - 500MB/s
>   SATA Rev. 2.0 — 100GB & 200GB - 255MB/s
>   400GB - 260MB/s
> **Sustained Random 4k Read/Write[2]**
>   100GB – 47,000/81,000 IOPS
>   200GB – 59,000/72,000 IOPS
>   400GB – 52,000/37,000 IOPS
> **Maximum Random 4k Read/Write[2]**
>   100GB – 55,000/83,000 IOPS
>   200GB – 59,000/73,000 IOPS
>   400GB – 52,000/37,000 IOPS
> **Enterprise SMART Tools** Reliability Tracking, Usage Statistics, Life Remaining, Wear Leveling, Temperature, Drive Life Protection
> **Power Consumption**
>   100GB — 0.5W (TYP) Idle / 1.2W (TYP) Read / 2.7W (TYP) Write
>   200GB — 0.5W (TYP) Idle / 1.2W (TYP) Read / 3.1W (TYP) Write
>   400GB — 0.5W (TYP) Idle / 1.2W (TYP) Read / 5.0W (TYP) Write
> **Dimensions** 69.9mm x 100mm x 7mm
> **Weight** 96.6 grams
> **Storage temperature** -40 ~ 85°C
> **Operating temperature** 0 ~ 70°C
> **TRIM** Not supported
> **MTBF** 10,000,000 Hrs
> **Total Bytes Written (TBW)[3]** 100GB – 428TB
>   200GB – 857TB
>   400GB – 1714TB

Test System: Intel® C600 Romley Server Platform

SandForce DRIVEN™ By LSI

1 Please note: Some of the listed capacity on a Flash storage device is used for formatting and other functions and thus is not available for data storage. As such, the actual available capacity for data storage is less than what is listed on the products. For more information, go to Kingston's Flash Memory Guide at kingston.com/flash_memory_guide.
2 Based on "out-of-box performance" with IOMeter08. Speed may vary due to host hardware, software and usage.
3 Total Bytes Written (TBW) refers to how much total data can be written to an SSD for a given workload before the drive reaches its endurance limits.
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