Server SSD: ES-Series

ESN-200: Feature-Rich PCIe Gen 5 High-Performance Enterprise Storage

Key Product Features

- Self-Encrypting Drive option
  - AES-XTS 256-bit Encryption
  - TCG Opal 2.0 Support
- End-to-End Data Path Protection
- Power Loss Protection (PLP)
- High-Reliability with MTBF of 2.5 million hours
- Single or Dual Port

Key Product Metrics	
Sequential Read	Up to 14,800 MB/s
Sequential Write	Up to 8,700 MB/s
Random Read	Up to 3,000K IOPS
Random Write	Up to 900K IOPS
Interface	PCIe Gen 5x4 NVMe 2.0
Capacity	Up to 30 TB
Form Factor	U.2 and E3.S
Drive Write Per Day	1 or 3

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ESN-200E

U.2						
	Capacity[1]	1600GB	3200GB	6400GB	12800GB	25600GB
Performance[2,3]	Sequential Read	14,800 MB/s	14,800 MB/s	14,800 MB/s	14,800 MB/s	TBD
	Sequential Write	4,300 MB/s	8,600 MB/s	8,700 MB/s	8,350 MB/s	TBD
	4K Random Read	2,400K IOPS	3,000K IOPS	3,000K IOPS	3,000K IOPS	TBD
	4K Random Write	400K IOPS	800K IOPS	900K IOPS	900K IOPS	TBD
Power Consumption[4]	Max	25 W	25 W	25 W	25 W	25 W
	Idle	5 W	5 W	5 W	5 W	5 W
Latency	4K Random Read	60 µs	60 µs	60 µs	60 µs	60 µs
	4K Random Write	10 µs	10 µs	10 µs	10 µs	10 µs
E3.S						
	Capacity[1]	1600GB	3200GB	6400GB	12800GB	-
Performance[2,3]	Sequential Read	14,800 MB/s	14,800 MB/s	14,800 MB/s	14,800 MB/s	-
	Sequential Write	4,300 MB/s	8,600 MB/s	8,700 MB/s	8,350 MB/s	-
	4K Random Read	2,400K IOPS	3,000K IOPS	3,000K IOPS	3,000K IOPS	-
	4K Random Write	400K IOPS	800K IOPS	900K IOPS	900K IOPS	-
Power Consumption[4]	Max	25 W	25 W	25 W	25 W	-
	Idle	5 W	5 W	5 W	5 W	-
Latency	4K Random Read	60 µs	60 µs	60 µs	60 µs	-
	4K Random Write	10 µs	10 µs	10 µs	10 µs	-

Features	
Interface	PCIe 5.0 x 4
NAND Flash	3D TLC
DWPD[5]	3
UBER	1 in 10^{18}
Operating Temperature	0°C - 70°C
Non-Operating Temperature	-40°C - 85°C

Key Features

- Dual Port
- Power Loss Data Protection
- Namespaces: 64
- MF-QoS

(1) 1 GB = 1,000,000,000 bytes.
(2) Sequential Performance is based on FIO on Linux, 128K, with QD=32, 1 worker, and test drive set as secondary.
(3) Random Performance is based on FIO on Linux, 4K data size, QD=32, 1 worker, 4K aligned.
(4) Power consumption is measured during the sequential read/write and random read/write operations performed by iometer with the conditions described in (2)(3).
(5) The results of DWPD are obtained in compliance with JESD219A Standards.

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ESN-200P

U.2						
	Capacity[1]	1920GB	3840GB	7680GB	15360GB	30720GB
Performance[2,3]	Sequential Read	14,800 MB/s	14,800 MB/s	14,800 MB/s	14,800 MB/s	TBD
	Sequential Write	4,300 MB/s	8,600 MB/s	8,700 MB/s	8,350 MB/s	TBD
	4K Random Read	2,400K IOPS	3,000K IOPS	3,000K IOPS	3,000K IOPS	TBD
	4K Random Write	170K IOPS	380K IOPS	500K IOPS	500K IOPS	TBD
Power Consumption[4]	Max	25 W	25 W	25 W	25 W	25 W
	Idle	5 W	5 W	5 W	5 W	5 W
Latency	4K Random Read	60 µs	60 µs	60 µs	60 µs	60 µs
	4K Random Write	10 µs	10 µs	10 µs	10 µs	10 µs
E3.S						
	Capacity[1]	1920GB	3840GB	7680GB	15360GB	-
Performance[2,3]	Sequential Read	14,800 MB/s	14,800 MB/s	14,800 MB/s	14,800 MB/s	-
	Sequential Write	4,300 MB/s	8,600 MB/s	8,700 MB/s	8,350 MB/s	-
	4K Random Read	2,400K IOPS	3,000K IOPS	3,000K IOPS	3,000K IOPS	-
	4K Random Write	170K IOPS	380K IOPS	500K IOPS	500K IOPS	-
Power Consumption[4]	Max	25 W	25 W	25 W	25 W	-
	Idle	5 W	5 W	5 W	5 W	-
Latency	4K Random Read	60 µs	60 µs	60 µs	60 µs	-
	4K Random Write	10 µs	10 µs	10 µs	10 µs	-

Features	
Interface	PCIe 5.0 x 4
NAND Flash	3D TLC
DWPD[5]	1
UBER	1 in 10^{18}
Operating Temperature	0°C - 70°C
Non-Operating Temperature	-40°C - 85°C

Key Features

- Dual Port
- Power Loss Data Protection
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Product Configurations

For more information on available configurations, please contact us at: inquiries@rpics.com.

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