Nytro® XF1230 SATA SSD

Data Sheet

Key Features and Benefits

- SATA 6Gb/s interface for easy deployment in legacy storage infrastructures
- Best-in-class read and write latency for faster random access
- Highly tuned for read-intensive workloads
- One Drive Write Per Day (DWPD) for higher lifetime endurance
- Power-optimized for active workloads with less than 4.3W power consumption
- Power loss data protection circuit to prevent loss of data in the event of unexpected power interruptions
- Enterprise-class reliability with 2 million hours MTBF and a five-year limited warranty

Cost-Effective SSD for Cloud Server Applications

With the growth of public and private cloud computing data centers that require faster random accesses, cost-effective, higher-performance solid state drives (SSDs) have become essential. SSDs with the SATA storage interface meet the high performance and reliability requirements without disrupting legacy storage infrastructures and additional investments in sofware and hardware.

The Seagate® Nytro® XF1230 SATA SSD is a cost-effective, enterprise-grade SSD solution designed to deliver high, sustained and consistent performance for significantly improved quality of service and enhanced user experience.

Optimized for Read-Intensive Applications

Applications with read-intensive workloads benefit greatly from SSDs that have faster random access performance. The current trend suggests that the majority of cloud server applications will be using SSDs for read-centric workloads.

By delivering 98,000 sustained random read IOPS, the Nytro XF1230 SATA SSD significantly boosts the performance of read-intensive applications, such as boot, operational databases, customer-facing web server applications, data analytics and reporting.

Enterprise-Class Reliability and Data Protection

Your business data is critical, especially for customer-facing cloud and high-demand applications. The Nytro XF1230 SATA SSD offers a robust enterprise feature set, including end-to-end data protection and robust error-correction algorithms for solid reliability, and power-loss data protection (PFAIL) to maintain data integrity and to prevent loss of data in the event of unexpected power interruptions.

Power-Optimized for Active Workloads

Cloud computing data centers require energy-efficient storage solutions to improve performance while lowering the total cost of ownership. When deploying high-load services and web applications that often access storage at high frequencies and trigger continuous active workloads, it is critical to deploy a storage system tuned and optimized with higher power efficiency in mind. The Nytro XF1230 SATA SSD is ideally tuned across all capacity points to consume less than 4.3W active power.

SEAGATE

Nytro® XF1230 SATA SSD

Specifications	1920GB[1]	960GB[1]	480GB[1]	240GB[1]
Standard Model	XF1230-1A1920	XF1230-1A0960	XF1230-1A0480	XF1230-1A0240
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
NAND Flash Type	eMLC	eMLC	eMLC	eMLC
Form Factor	2.5 in × 7mm	2.5 in × 7mm	2.5 in × 7mm	2.5 in × 7mm
Performance[2]				
Sequential Read (MB/s) Sustained, 128KB[2]	560	560	560	560
Sequential Write (MB/s) Sustained, 128KB[2]	445	490	500	300
Random Read (IOPS) Sustained, 4KB QD32[2]	98,000	98,000	98,000	96,700
Random Write (IOPS) Sustained, 4KB QD32[2]	16,000	16,800	15,800	8,700
Average Read Latency (µs), 4KB QD1[2]	140	140	140	140
Average Write Latency (µs), 4KB QD1[2]	60	60	60	60
Endurance/Reliability				
Lifetime Endurance (Drive Writes per Day)[3]	1	1	1	1
Total Bytes Written (TB)	3009	1504	752	376
Nonrecoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	1 per 10E17
Mean Time Between Failures (MTBF, hours)	2M	2M	2M	2M
Power Management				
+5V Active Max Average Power (W)	4.3	4.2	4.2	2.8
Average Idle Power (W)	0.9	0.8	0.8	0.8
Environmental				
Temperature, Operating (°C)	0 to 70	0 to 70	0 to 70	0 to 70
Temperature, Nonoperating (°C)	–40 to 95	–40 to 95	–40 to 95	–40 to 95
Temperature Change Rate/Hr, Max (°C)	30	30	30	30
Shock, 0.5ms (Gs)	1500	1500	1500	1500
Physical				
Height (in/mm, max)	0.276/7.00	0.276/7.00	0.276/7.00	0.276/7.00
Width (in/mm, max)	2.760/70.10	2.760/70.10	2.760/70.10	2.760/70.10
Depth (in/mm, max)	3.947/100.25	3.947/100.25	3.947/100.25	3.947/100.25
Weight (lb/g)	0.187/85	0.187/85	0.187/85	0.187/85
Carton Unit Quantity	10	10	10	10
Warranty				
Limited Warranty (years)	5	5	5	5

1 One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

2 Performance data is based on testing under certain workload conditions and is subject to change.

3 DWPD is tested to the JEDEC Enterprise workload with the assumption that drive usage does not exceed 90%.

SERIAL ATA

Seagate 5-Year Warranty

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