

Nytr[®] XF1230 SATA SSD

Data Sheet

Key Features and Benefits

- SATA 6 Gb/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
- Power-optimised for active workloads with less than 4.8 W 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 centres 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 software and hardware.

The Seagate[®] Nytr[®] 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.

Optimised 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 Nytr 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 Nytr 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-Optimised for Active Workloads

Cloud computing data centres 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 optimised with higher power efficiency in mind. The Nytr XF1230 SATA SSD is ideally tuned across all capacity points to consume less than 4.8 W active power.



Nytrio[®] XF1230 SATA SSD



Specifications	1,920 GB ¹	960 GB ¹	480 GB ¹	240 GB ¹
Standard Model	XF1230-1A1920	XF1230-1A0960	XF1230-1A0480	XF1230-1A0240
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
NAND Flash Type	eMLC	eMLC	eMLC	eMLC
Form Factor	2.5 in × 7mm	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm
Performance²				
Sequential Read (MB/s) Sustained, 128 KB ²	560	560	560	560
Sequential Write (MB/s) Sustained, 128 KB ²	430	460	500	290
Random Read (IOPS) Sustained, 4 KB QD32 ²	98,000	98,000	98,000	98,000
Random Write (IOPS) Sustained, 4 KB QD32 ²	17,000	16,000	15,000	8,000
Average Read Latency (µs), 4 KB QD1 ²	135	130	135	130
Average Write Latency (µs), 4 KB QD1 ²	59	55	56	105
Endurance/Reliability				
Lifetime Endurance (Drive Writes per Day)	0.67	0.67	0.6	0.5
Non-recoverable Read Errors per Bits Read	1 per 10 ¹⁷	1 per 10 ¹⁷	1 per 10 ¹⁷	1 per 10 ¹⁷
Mean Time Between Failures (MTBF, hours)	2 M	2 M	2 M	2 M
Power Management				
+5 V Active Max Average Power (W)	4.8	4.7	3.9	2.9
Average Idling Power (W)	0.7	0.7	0.6	0.6
Environmental				
Temperature, Operating (°C)	0 to 70	0 to 70	0 to 70	0 to 70
Temperature, Non-operating (°C)	-40 to 95	-40 to 95	-40 to 95	-40 to 95
Temperature Change Rate/Hr, Max (°C)	30	30	30	30
Shock, 0.5 ms (Gs)	1,500	1,500	1,500	1,500
Vibration, 7 Hz to 800 Hz (Grms)	3.08	3.08	3.08	3.08
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)	2.750/69.85	2.750/69.85	2.750/69.85	2.750/69.85
Depth (in/mm, max)	3.951/100.35	3.951/100.35	3.951/100.35	3.951/100.35
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.



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AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, +1 408 658 1000
 ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, +65 6485 3888
 EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 16-18 rue du Dôme, 92100 Boulogne-Billancourt, France, +33 1 41 86 10 00

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