



DATA SHEET

Integrated Storage Server Exos AP 2U12



Powerful and compact, the Seagate® Exos® AP 2U12 all-in-one, expandable, low-cost integrated storage server supports growing businesses with the latest drive technologies and delivers modern processing power.



Best-Fit Applications

- Small to mid-sized businesses
- Scalable capacity with the latest drive technologies
- Low latency data access

Key Advantages

Save space and maximize capacity with up to 12 drives that can hold 216TB per chassis in a 2U rackmount enclosure (when using 18TB drives)

Dual x86 controllers with flexible performance options that fit your software requirements and budget, including high availability

Deliver data fast with 7Gb/s reads and 5.5Gb/s writes

Future-proofed to support network infrastructures with 10GbE, 25GbE, and 100GbE I/O options

Expandable with up to 8 total EBOD chassis to grow with your business

Dual 12Gb/s SAS controllers are compliant with latest architecture standards for maximum data throughput. Ensure data is constantly available with hot-swappable controllers, PSUs, system fan modules, drives, and expander cards. Modular solution is easily serviceable and allows for interchangeability with other Exos products.

Reduce power consumption 80 PLUS Gold and 80 PLUS Platinum power supply options with certified adaptive cooling technology.



| Specifications | |
|------------------------------------|--|
| Controller Specifications | |
| Controllers | One or two AP-BV-1 Controllers, redundancy optional |
| CPU | AMD SP3 7292P EPYC CPU (8,12,16 Core) |
| Memory | 4 x DDR4 - 3200MHz DIMM slots - 8, 16,32,64GB DIMM support |
| Internal Boot Drive | Single or Dual M.2 NVMe SSD for Redundant Boot/Logs |
| Onboard I/O | On-board Mellanox CX4 Dual Port 10/25GbE I/O, / 2x 1GbE onboard connections (Management / Data) |
| PCIE Expansion | One low-profile, half-length PCI Express Gen 4 x16 Host Interface Slot One OCP v2.0 Gen 4x8 host interface slot |
| Storage Infrastructure | Gen 4 x8 PCIe Lanes to 12G Broadcom SAS Controller, Dual 12G x4 Mini-SAS HD External Expansion Ports |
| Inter-Controller Link | PCI Express Gen 3 x16 NTB Inter-controller Interface |
| Chassis Specifications | |
| Redundant Path | Yes (SAS only) |
| Management/Status Reporting | Redfish API + IPMI & SES |
| Device Support | 12Gb/s SAS drives and 6Gb/s SATA drives |
| Max Drives Per Enclosure | up to 12 x 3.5-in LFF or 2.5-in SFF drives (in 3.5-in conversion carrier) (for a full list of supported drives, please contact your account or sales manager) |
| Hot-Swappable Components | HDDs and SSDs (in chassis data slots), power supply and cooling modules units (PCU), and controllers |
| Physical | Height: 87.9mm / 3.46 in Width: 443mm / 17.44 in Depth: 630mm / 24.8 in Width (w/ear mounts): 483mm / 19.01 in Weight: 17kg / 38 lb Weight (with drives): 32kg / 71 lb |
| Power Requirements—AC Input | |
| Input Power Requirements | 100V-240V AC 60Hz/50Hz |
| Max Power Output per PSU | 764W |
| Environmental/Temperature Ranges | |
| Operating/Nonoperating Temperature | ASHRAE A2, 5°C to 35°C (41°F to 95°F), derate 1°C/300m above 900m, 20°C/hr max rate of change / -40°C to 70°C (-40°F to 158°F) |
| Operating/Nonoperating Humidity | -12°C DP minimum, 8% RH to 85% RH, max DP 21°C / 5% to 100% noncondensing |
| Operating/Nonoperating Shock | 5 Gs, 10ms, half sine pulses / 15 Gs, 10ms, half sine pulses |
| Operating/Nonoperating Vibration | 0.21 Gs rms, 5Hz to 500Hz random / 1.04 Gs rms, 2Hz to 200Hz random |
| Standards/Approvals | |
| Safety Certifications | UL62368-1 ED3 (United States) CAN/CSA-C22.2 No.60950-1-07/No.62368-1-14, 2nd Ed (Canada) EN62368-1 (European Union) IEC 62368-1 Ed3 (International) CQC (China PRC – CQC Power Supplies) BIS (India – BIS Power Supplies) |
| Emissions (EMC) | FCC CFR 47 Part 15 Subpart B Class A (United States) ICES/NMB-003 Class A (Canada) EN 55032 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3 (Europe) AS/NZS CISPR 32 Class A (Australia/New Zealand) VCCI Class A (Japan) KS 32 Class A/KS 35 (S. Korea) CNS 13438 Class A (Taiwan) |
| Harmonics | EN 61000-3-2 (EU) |
| Flicker | EN 55024 (EU) KS 24/KS 35 (S. Korea) CISPR 24/CISPR35 |
| Immunity | EN 55024 (EU) KN 24/KN 35 (S. Korea) CISPR 24/CISPR35 |
| Environmental Standards | The RoHS Directive (2015/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC/1907/2006) The Batteries Directive (2006/66/EC) |
| Standard Marks/Approvals | Australia/New Zealand (RCM), Canada (cUL/ICES/NMB-003 Class A), China (CCC – PSU only), European Union (CE), Japan (VCCI), South Korea (KC), Taiwan (BSMI), United States (FCC/UL), The Eurasian Economic Union (EAC), India (BIS) |
| Ecodesign | Commission Regulation (EU) 2019/424 (Directive 2009/125/EC) |
| Power Supply Units | |
| Power Supply | Ecodesign (Part SP-PCM2-HE764-AC/ Model SPAXRTX-07xx) – Gold Power Efficiency 115VAC/60Hz 230VAC50/Hz 10% Load = >80% >80% 20% Load = >87% >88% 50% Load = >90% >92% 100% Load = >87% >88% Power Factor Condition 10% Loading = N/A 20% Loading = >0.90 50% Loading = >0.90 100% Loading = >0.95 |
| Power Supply | Ecodesign (Model SPASGAT-01) – Platinum Power Efficiency 115VAC/60Hz 230VAC50/Hz 10% Load = >80% >80% 20% Load = >90% >90% 50% Load = >92% >94% 100% Load = >89% >91% Power Factor Conditions (PFC) 10% Loading = N/A 20% Loading = >0.90 50% Loading = >0.95 100% Loading = >0.95 |

seagate.com



© 2022 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. Exos and the Exos logo are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and disk capacity. Seagate reserves the right to change, without notice, product offerings or specifications. DS2050.5-2212US