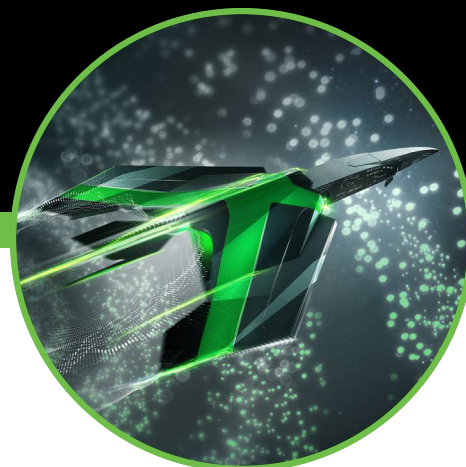


# EXOS™ / FUSE



DATA SHEET

## Integrated Storage Server Exos FUSE AP2U12



Powerful and compact, the Seagate® Exos® FUSE AP2U12 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 per chassis in a 2U rackmount enclosure.

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

Support modern network infrastructures with 10GbE, 25GbE, and 100GbE I/O options.

Expandable with Dual 12Gb/s mini SAS connections to scale with your business.

Modular solution is easily serviceable allowing for interchangeability with other Exos products. Ensure data is constantly available with hot-swappable power, and system fan modules, drives, and expander cards

Reduce power consumption 80 PLUS Platinum power supply option with certified adaptive cooling technology.



| Specifications                     |                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Controller Specifications          |                                                                                                                                                                                                                                                                                                                                                                                                      |
| Controllers                        | One or two AP-BV-1 Controllers, redundancy optional                                                                                                                                                                                                                                                                                                                                                  |
| CPU                                | AMD SP3 7292P EPYC CPU (12,16 Core)                                                                                                                                                                                                                                                                                                                                                                  |
| Memory                             | 4 x DDR4 - 3200MHz DIMM slots - 32,64,128GB DIMM support                                                                                                                                                                                                                                                                                                                                             |
| Internal Boot Drive                | Single or Dual M.2 NVMe SSD for Redundant Boot/Logs                                                                                                                                                                                                                                                                                                                                                  |
| Onboard I/O                        | On-board NVidia 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                       | <div> Ecodesign (Model SPASGAT-01) – Platinum<br/> Power Efficiency 115VAC/60Hz   230VAC50/Hz<br/> 10% Load = &gt;80%   &gt;80%<br/> 20% Load = &gt;90%   &gt;90%<br/> 50% Load = &gt;92%   &gt;94%<br/> 100% Load = &gt;89%   &gt;91% </div> <div> Power Factor Conditions (PFC)<br/> 10% Loading = N/A<br/> 20% Loading = &gt;0.90<br/> 50% Loading = &gt;0.95<br/> 100% Loading = &gt;0.95 </div> |