



DATA SHEET

Efficient. Intelligent. Scalable.

## Exos AP 5U84



Seagate® Exos® AP 5U84 is the datasphere's affordable application platform for growth, performance and high capacity.



### Product Highlights

- Maximise your investment with this low-TCO integrated compute and high-density storage system
- Leverage industry-leading CPU technology
- Efficiently manage your data centre with a 5U rackmount enclosure and unique drawer design that provides easy access to drives
- Future-proof your data centre with support for current and next generation HDDs and SSDs
- Reduce power consumption with 80 PLUS Platinum certified power supplies and adaptive cooling technology

### Key Advantages

**Reduce Data Centre Footprint.** Build a space-saving private cloud with this all-in-one high-density, high-capacity building block. With this high-performance solution, you'll never sacrifice fast input/output data speeds. Future-proofed, this Exos supports a variety of deployments. Modular, interchangeable components mean easy upgrades and fast innovations.

**Deliver a Versatile Architecture Built to Grow.** Minimise your TCO and store up to 1.344 PB<sup>1</sup> of data with an enclosure that leads the industry in both density and cost-for-performance while enabling easy change in functionality by swapping to EBOD expansion controllers or hardware-based RAID controllers. This flexible enclosure includes support and capabilities to manage cables, universal ports, self-configuration controls and standardized zoning.

**Ensure Applications Have Access to Critical Data or Create Powerful Multi-Node Configurations.** Dual controller redundancy, inter-controller communication and multi-controller drive access safeguards your data with powerful redundancy. Additionally, split the chassis into two nodes to yield powerful multi-node architecture in a single chassis.

**Reduce Touch Points Between Storage Modules and Storage Server.** This enclosure is suited for both high-capacity and transaction-dependent environments that demand tighter Service Level Agreement (SLA) requirements and need faster response times for optimal data availability. Recognise cost savings through high performance while reducing power consumption with 80 PLUS Platinum certified adaptive cooling technology.

**Build In Security at the Foundation of the Data Life Cycle.** Protect your valuable business assets with compatible Seagate Secure™ SSDs and hard drives.



| Specifications                          |   |
|---|---|
| <b>Controller Specifications</b>        |   |
| Controller and Quantity                 | One or two AP-BV-1 Controllers, redundancy optional   |
| CPU Type and Quantity Per Controller    | AMD SP3 7292P EPYC CPU (8,12,16 Core)   |
| Memory Type and Quantity Per Controller | 4 x DDR4 - 3200MHz DIMM slots - 8, 16, 32, 64 GB DIMM support +   |
| Internal Boot Drive Per Controller      | Dual NVMe M.2 Board with Single or Dual M.2 NVMe SSD  |
| Onboard I/O Per Controller              | On-board Mellanox CX4 Dual Port 10/25 GbE I/O 2 x 1GbE onboard connections (Management / Data)  |
| PCIe Expansion Per Controller           | One low-profile, half-length PCI Express Gen 4 x16 Host Interface Slot, and one OCP v2.0 Gen 4x8 host interface slot  |
| Storage Infrastructure                  | On each controller: Gen 4 x8 PCIe Lanes to 12G Broadcom SAS Controller, 12G x4 Mini-SAS HD External Expansion Ports   |
| Inter-Controller Link                   | PCI Express Gen 3 x16 NTB Inter-controller Interface  |
| <b>Chassis Specifications</b>           |   |
| Redundant Drive Path                    | Yes (SAS only)  |
| Host/Expansion I/O Ports                | Two x4 mini-SAS HD Expansion I/O connectors   |
| Management/Status Reporting             | Redfish API + IPMI & SES  |
| Device Support                          | 12 Gb/s SAS drives  |
| Max Drives Per Enclosure                | 84 x 3.5-in LFF drive slots (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 units (PSU), cooling modules, side-plane expanders, and controllers   |
| Physical                                | Height: 220 mm / 8.65 in (5 EIA units)   Width: 483 mm / 19 in (IEC rack compliant)   Depth: 933 mm / 36.75 in   Weight: 135 kg / 298 lb (with drives, no rail kit)   |
| <b>Power Requirements</b>               |   |
| Input Power Requirements                | 180VAC-264VAC, 50Hz/60Hz  |
| Max Power Output per PSU                | 2200W   |
| <b>Environmental Requirements</b>       |   |
| Operating/Non-operating Altitude        | -100 m to 3,000 m (-330 ft to 10,000 ft) / -100 m to 12,192 m (-330 ft to 40,000 ft)  |
| Operating/Non-operating 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/Non-operating Humidity        | -12°C DP and 10% RH to 21°C DP and 80% RH, Max DP 21°C / 5% to 100% non-condensing  |
| Operating/Non-operating Shock           | 5 Gs 10ms half sine (X, Y, and Z axes), 20 Gs 10ms half sine (X and Y axes)   |
| Operating/Non-operating Vibration       | 0.21 Gs rms (5Hz to 500Hz) / 1.04 Gs rms (2Hz to 200Hz)   |
| <b>Standards/Approvals</b>              |   |
| 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)   |
| Ecodesign                               | Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)   |
| 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) |
| Standard Marks/Country Approvals        | North America (FCC, UL, cUL, ICES/NMB-003 Class A), Europe (CE), China (CQC – PSU only), Taiwan (BSMI), Korea (KC), Japan (VCCI), Australia/New Zealand (RCM – formerly C-tick)   |

seagate.com



© 2020 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, the Exos logo, Seagate Secure, and the Seagate Secure 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 drive capacity. Seagate reserves the right to change, without notice, product offerings or specifications. DS2013.6-2112GB December 2021