



DATA SHEET

Integrated Storage Server Exos AP 5U84



Seagate® Exos® AP 5U84 Integrates compute with massive capacity for larger data center applications.



Product Highlights

- Maximize your investment with this low-TCO integrated compute and high-density storage system
- Leverage industry-leading CPU technology
- Efficiently manage your data center with a 5U rackmount enclosure and unique drawer design that provides easy access to drives
- Future-proof your data center with support for current and next-generation HDDs and SSDs

Key Advantages

Reduce Data Center 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. Minimize your TCO and store up to 1.344PB¹ 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.

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.

Reduce Power Consumption 80 PLUS Titanium and 80 PLUS Platinum power supply options with 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	
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 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	12Gb/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: 220mm / 8.65 in (5 EIA units) Width: 483mm / 19 in (IEC rack compliant) Depth: 933mm / 36.75 in Weight: 135kg / 298 lb (with drives, no rail kit)
Power Requirements	
Input Power Requirements	200VAC-240VAC, 50Hz/60Hz
Max Power Output per PSU	2200W
Environmental Requirements	
Operating/Nonoperating Altitude	-100m to 3000m (-330 ft to 10,000 ft) / -100m to 12,192m (-330 ft to 40,000 ft)
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 and 10% RH to 21°C DP and 80% RH, Max DP 21°C / 5% to 100% noncondensing
Operating/Nonoperating Shock	5 Gs 10ms half sine (X, Y, and Z axes), 20 Gs 10ms half sine (X and Y axes)
Operating/Nonoperating Vibration	0.21 Gs rms (5Hz to 500Hz) / 1.04 Gs rms (2Hz to 200Hz)
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)
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)
Ecodesign	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)
Power Supply Units	
Power Supply	Ecodesign (Part UD-PCM2-2200-AC/ Model SGT-S-2200ADE00) – Titanium
	Power Efficiency 230VAC50/Hz
	10% Load = >90%
	20% Load = >94%
	50% Load = >96%
100% Load = >91%	
Power Supply	Ecodesign (Part UD-PSU01-2200-AC/ Model FS2K2HS180-xx) – Platinum
	Power Efficiency 230VAC50/Hz
	10% Load = >81%
	20% Load = >89%
	50% Load = >93%
100% Load = >90%	
	Power Factor Conditions (PFC)
	10% Loading = >0.80
	20% Loading = >0.95
	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, the Exos logo, and Seagate Secure 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. The export or re-export of Seagate hardware or software is regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit www.bis.doc.gov), and may be controlled for export, import, and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS2013.7-2212US