



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 1.344PB<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.

**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 55024, 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 13439 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 230VAC/50/Hz 10% Load = >90% 20% Load = >93% 50% Load = >96% 100% Load = >91% Power Factor Conditions (PFC) 10% Loading = >0.80 20% Loading = >0.92 50% Loading = >0.95 100% Loading = >0.95
Power Supply	Ecodesign (Part UD-PSU01-2200-AC/ Model F52K2H5180-xx) - Platinum Power Efficiency 230VAC/50/Hz 10% Load = >90% 20% Load = >93% 50% Load = >96% 100% Load = >90% Power Factor Conditions (PFC) 10% Loading = >0.80 20% Loading = >0.90 50% Loading = >0.95 100% Loading = >0.95

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