



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

- 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
- Reduce power consumption with 80 PLUS Platinum certified power supplies and adaptive cooling technology

Key Advantages

Reduce Data Center Footprint. Thanks to its powers of integration, Exos AP 5U84 makes bringing compute closer to storage a reality. 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 while helping you accelerate market introduction of new technologies and significantly simplify development and testing of storage implementations.

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. It meets stringent worldwide requirements for recycling and environmental impact, and can help you recognize 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	
Controller Specifications	
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, 16,32,64GB 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 10/25GbE 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
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	180VAC-264VAC, 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)
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)

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