



DATA SHEET

Integrated Storage Server Exos AP 2U12



Powerful and compact, the Seagate® Exos® AP 2U12 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 maximise capacity with up to 12 drives that can hold 216 TB per chassis in a 2U rackmount enclosure (when using 18 TB drives)

Dual x86 controllers with flexible performance options that fit your software requirements and budget, including high availability

Deliver data fast with 7 Gb/s reads and 5.5 Gb/s writes

Future-proofed to support network infrastructures with 10 GbE, 25 GbE, and 100 GbE I/O options

Expandable with up to 8 total EBOD chassis to grow with your business

Dual 12 Gb/s SAS controllers are compliant with latest architecture standards for maximum data throughput. Ensure data is constantly available with hot-swappable controllers, PSUs, system fan modules, drives, and expander cards. Modular solution is easily serviceable and allows for interchangeability with other Exos products.

Reduce power consumption 80 PLUS Gold and 80 PLUS Platinum power supply options with certified adaptive cooling technology.



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, 64 GB 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 10/25 GbE 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	12 Gb/s SAS drives and 6 Gb/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: 87.9 mm/3.46 in Width: 443 mm/17.44 in Depth: 630 mm/24.8 in Width (w/ear mounts): 483 mm/19.01 in Weight: 17 kg/38 lb Weight (with drives): 32 kg/71 lb
Power Requirements — AC Input	
Input Power Requirements	100V-240V AC 60 Hz/50 Hz
Max Power Output per PSU	764W
Environmental/Temperature Ranges	
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 minimum, 8% RH to 85% RH, max DP 21°C / 5% to 100% non-condensing
Operating/Non-operating Shock	5 Gs, 10ms, half sine pulses/15 Gs, 10ms, half sine pulses
Operating/Non-operating Vibration	0.21 Gs rms, 5Hz to 500 Hz random / 1.04 Gs rms, 2Hz to 200 Hz 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	Ecodesign (Part SP-PCM2-HE764-AC/Model SPAXRTX-07xx) – Gold
	Power Efficiency 115 VAC/60 Hz 230 VAC/50 Hz
	10% Load = >80% >80%
	20% Load = >87% >88%
Power Supply	Ecodesign (Model SPASGAT-01) – Platinum
	Power Efficiency 115 VAC/60 Hz 230 VAC/50 Hz
	10% Load = >80% >80%
	20% Load = >90% >90%
Power Supply	Power Factor Condition
	10% Loading = N/A
	20% Loading = >0.90
	50% Loading = >0.90
Power Supply	Power Factor Conditions (PFC)
	10% Loading = N/A
	20% Loading = >0.90
	50% Loading = >0.95
Power Supply	100% Loading = >0.95

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