



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	
<b>Controller Specifications</b>	
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
<b>Chassis Specifications</b>	
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
<b>Power Requirements — AC Input</b>	
Input Power Requirements	100V-240V AC 60 Hz/50 Hz
Max Power Output per PSU	764W
<b>Environmental/Temperature Ranges</b>	
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
<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)
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)
<b>Power Supply Units</b>	
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
	100% Loading = >0.95
	100% Loading = >0.95
	100% Loading = >0.95

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