

Powerful and compact, the KloudStor kStore 4612AP 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

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- Save space and maximise capacity with up to 12 drives per chassis in a 2U rackmount enclosure.
- 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
- Support modern network infrastructures with 10 GbE, 25 GbE and 100 GbE I/O options.
- Expandable with Dual 12 Gb/s mini SAS connections to scale with your business.
- Modular solution is easily serviceable, allowing for interchangeability with other kStore products. Ensure data is constantly available with hot-swappable power, and system fan modules, drives and expander cards.
- Reduce power consumption 80 PLUS Platinum power supply options with certified adaptive cooling technology.

### ABOUT KLOUDSTOR

With extensive experience in enterprise data protection and storage management, KloudStor focuses on serving and meeting the growing data needs of customers with innovative and highly scalable 'On-Premise as-a-Service' solutions. With a flexible pay-per-consumption monthly subscription model, we provide the best of on-premise performance and security with cloud flexibility.

KloudStor's fully managed solutions are supported by a team of highly skilled and experienced data management experts. Our partnerships with Quantum and Seagate, leading technology companies in the field of data storage and backup, enable us to provide proven, robust and trusted as-a-Service solutions for our customers ensuring that their operations and businesses are running continuously without compromise.

### KloudStor

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TECHNICAL SPECIFICATIONS

SPECIFICATIONS		
Controller Specifications		
Controllers	One or two AP-BV-1 Controllers, redundancy optional	
CPU	AMD SP3 7292P EPYC CPU (12,16 Core)	
Memory	4 x DDR4 - 3,200 MHz DIMM slots - 32,64,128 GB DIMM support	
Internal Boot Drive	Single or Dual M.2 NVMe SSD for Redundant Boot/Logs	
Onboard I/O	On-board NVidia 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 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 × 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	48 GB per system	
Max Power Output per PSU	1,024	
Management		
Interface Types	10/100/1000 Ethernet, Micro USB	
Protocols Supported	SNMP, SSL, SSH, SMTP, HTTP(S), REDFISH	
Management Consoles	Web GUI, CLI	
Management Software	Storage management console, Remote diagnostics, Non-disruptive updates, Volume expansion	
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 (Model SPASGAT-01) – Platinum Power Efficiency 115 VAC/60 Hz   230 VAC/50 Hz 10% Load = >80%   >80% 20% Load = >90%   >90% 50% Load = >92%   >94% 100% Load = >89%   >91% Power Factor Conditions (PFC) 10% Loading = N/A 20% Loading = >0.90 50% Loading = >0.95 100% Loading = >0.95	