POLYSTACK TECHNOLOGIES

IronPeak™

SCALABLE STORAGE SERVER

IP-AR-864-GB

Enterprise-Grade, High-Density Storage Built for AI, HPC, and Long-Term Data Retention

The Polystack IronPeak™ Highly Scalable Storage Server is engineered to deliver massive storage capacity, exceptional reliability, and cost-efficient scalability for AI, HPC, enterprise backup, media repositories, and long-term archival workloads. Designed to manage rapidly growing datasets, it combines high-density storage architecture with intelligent software-defined data protection and performance optimization.

EFFICIENCY MEETS POWER

- **Advanced AMD EPYC Processors**
  Up to 192 cores with dual AMD EPYC 9004/9005 Series processors, delivering balanced performance and power efficiency for any work load.

- **Exceptional Memory Capacity**
  Supports up to 3TB of DDR5 RDIMMs memory, ensuring fast data access and unparalleled performance for memory-intensive applications.

BUILT TO EMPOWER MODERN ENTERPRISES

- **Flexible Storage and Expansion**
  - Support for a range of storage options, including SATA, SAS and NVMe drives, to meet the demands of complex data operations.
  - Ultra-High-Density Storage powered by SMR/CMR HDD technology, maximizing capacity while reducing the total cost per terabyte.
  - Energy-Efficient Design that reduces operational costs and extends infrastructure lifecycle with longer hardware refresh cycles.
  - Built for Modern Workloads, including AI data lakes, backup & disaster recovery, video surveillance, media archives, scientific research, and enterprise object storage.

Scalable Data Storage Support !

Ideal for :

- Massive Storage Capacity
- Up to 65% Fewer HDD Replacements
- Lower Power Consumption. Higher Reliability.

RoHS

MAKE IN INDIA

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TECHNICAL SPECIFICATION

FEATURES	PARAMETER	DESCRIPTION
Processor	Supported CPU Series	Supports up to 2 processors of AMD EPYC™ 9005/9004 Series Processors
	Processor Configuration	Min 8 Core – Max 192 Core per Processor (Boost clock Up to 4.2GHz)
	Thermal Design Power (TDP)	Max. Up to 500W TDP ,
Chipset	System on Chip	System on Chip
Memory	DIMM Slots	24 x DIMM slots
	DIMM type	DDR5 RDIMM RAM
	Memory Capacity	16 GB / 32 GB / 64 GB / 128 GB, up to total 2TB capacity
	Memory Speed	AMD EPYC™ 9005: Up to 6400 MT/s AMD EPYC™ 9004: Up to 4800 MT/s
Storage	Front Drive Bays	24 x 2.5" / 3.5" SAS / SATA Hot Swap Front
	Rear Drive Bays	24 x 2.5" / 3.5" SAS / SATA Hot Swap Rear
		2 Optional Rear 2.5" SATA / NVMe
	Internal Storage	2 × M.2 PCIe/SATA SSD slots
	RAID Support	2 x 8GB cache RAID controllers supports RAID 0/1/5/6/10/50/60 CacheVault Power Module
Expansion	PCIe Expansion	4 x PCIe Gen5 x16 expansion slots
I/O Interfaces	Rear I/O	2 x USB 3.2 Gen1 1 x VGA
Video	BMC	Integrated in ASPEED® AST2600
Networking	LAN Connectivity	2 × 10GbE RJ45 Ethernet ports
	Management Network	Dedicated 10/100/1000 Management Ethernet port
Power Supply	Power Configuration	1+1 Redundant CRPS
	Input Voltage	110 - 240V AC
	Maximum Output	1200W/ 1600W/ 2000W/ 2700W
	Power Efficiency	80 PLUS Platinum Certified
Cooling System	System Cooling	Standard 8 x 8 cm Hot Swap middle fan
Platform Management	Secure Remote Management	Remote Power Control, Remote Power Cycling, Secure remote management over LAN/WAN through dedicated Gigabit Management Port with SSL encryption
	Monitoring	Real-time monitoring of processors, memory, fans, temperatures, voltages and power consumption
	Management Protocols	HTML5 Web Interface, KVM Remote Access,IPMI 2.0 and Redfish API
	Lifecycle Management	Remote firmware updates, diagnostics, Server health monitoring and Server event logging

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FEATURES	PARAMETER	DESCRIPTION
Platform Management	Virtual Media	Virtual Media support
	Dashboard	Unified web-based dashboard providing at-a-glance server status,
	Sensor Data	monitoring hardware sensor values including temperature, voltage and fan speed trends
	System event loggingfilled	SEL (System Event Log) stored in linear or circular buffer; supports export, clear and timestamped audit trail of all hardware and management events
	Directory & authentication	LDAP, Active Directory and RADIUS support for centralised user authentication, role-based access control and integration services
	Configuration management filled	Backup and restore of BMC / server configuration;
		SSL Settings
		SMTP Settings
Security	Platform Security	Secure Boot (Firmware and BIOS Level Security), Hardware Root of Trust / Dual Root of Trust, Policy-Based Security
		System Firewall
	Firmware Protection	Cryptographically Signed Firmware Updates with Secure Firmware Validation
	System Recovery	Automatic BIOS Recovery and Firmware Rollback Protection following a predefined security breach
	Network Security	Secure Network Adapter Firmware Boot
Operating Environment	Operating Temperature	10°C to 40°C
	Storage Temperature	-40°C to 60°C
	Operating Humidity	8% to 80% (non-condensing)
Operating System Support	Operating System Support	Ubuntu Server LTS
	Enterprise Linux	Red Hat Enterprise Linux (RHEL)
	Hypervisor Support	VMware ESXi, Proxmox
Physical Characteristics	Chassis Form Factor	6U Rack mount Chassis with Rail Kit Included
	Dimensions (D × W × H)	660 mm * 436 mm * 265 mm

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Adaptability Meets **Performance in Every Workload...**

APPLICATIONS

- Artficial Intelligence
- High Performance Computing
- Data Centers
- Cloud Computing

Polystack Technologies Pvt. Ltd.
1612, Office Tower, Logix City Centre
Sector-32, Noida, UP- 201301

sales@polystack.tech

www.polystack.tech

polystack.tech