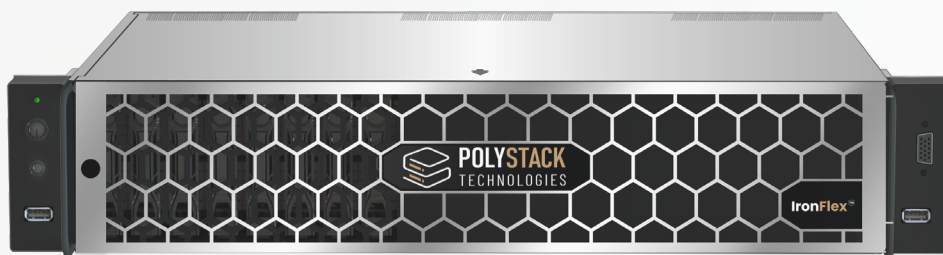


IronPeakTM

Revolutionize Efficiency and Adaptability
for Modern Enterprises.

IP-AR-524-G



Transform Your Business with Scalable, Flexible and High-Performance Computing Solutions

The IP-AR-524-G (4th Generation Server) is a versatile and reliable server designed to empower enterprises with exceptional computational capabilities. Built for organizations that demand performance and adaptability, this 2U rack server provides the flexibility and power required to handle diverse workloads seamlessly.

EFFICIENCY MEETS POWER

- ▶ **Advanced AMD EPYC Processors**
Up to 128 cores with dual AMD EPYC 9004 Series processors, delivering balanced performance and power efficiency for any workload.
- ▶ **Exceptional Memory Capacity**
Supports up to 3 TB of DDR5 RDIMMs or LRDIMMs 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 and NVMe drives, to meet the demands of complex data operations.
 - Expandability with PCIe Gen5 slots ensures readiness for future technology upgrades.
- ▶ **Robust Design for Enterprise Applications**
 - Redundant hot-swappable power supplies ensures reliable operations and minimize downtime.
 - Optimized airflow and thermal management for sustainable high performance.
 - TPM 2.0 support (optional) for enhanced security.

Scalable Workload Support !

Ideal for :

- ▶ Database Management and Analytics.
- ▶ Enterprise Workload Standardization.
- ▶ Virtualization and Cloud Computing.
- ▶ Multi-tenant Infrastructure.



TECHNICAL SPECIFICATION

PARAMETER	DESCRIPTION
Supported CPU Series	Supports up to one processors of AMD EPYC 9004 Series (Generation 4)
	Min 16 Core – Max 128 Core per Processor (Boost clock Up to 4.4GHz)
Thermal Design Power (TDP)	Up to 500W TDP , L3 CACHE - Up to 384 MB
AMD	AMD EPYC™ 9004 Series (Genoa/Bergamo)
Storage	Supports 8 x 2.5" drives
	(NVMe per port 30.72TB) (M.2 per port 1.92TB)
	8 NVMe
	8 – NVME with RAID CARD Support
	2 SLOTS of x1 PCIe Gen3 M.2
W x H x D (mm)	450 x 88 x 780 / 35 KG
ASIC	AST2600
Max DIMM slots	1 DIMMs/CH, 12 CH/CPU, Total 12 DIMMs
DIMM type	DDR5 RDIMMs , Advance ECC Supportable
Memory Capacity	16/32/64/128/256 GB, up to total 3 TB capacity
Memory Speed	Support upto 4800 MHz
Memory Voltage	1.1V
Front I/O	Front Port: 1 VGA, 2 USB 3.2 Gen1
Rear I/O	Rear: 1 MINI DP, 1 COM port, 2 USB3.2 Gen1, 1 management network
PCIe	PCIe expansion slots: 3 PCIe Gen5.0 16 Slots full-height slots OCP slot: 1 PCIe 3.0 x16, Mezzanine slot
Ethernet	1 G*1 management network port On-board 1 G*1 onboard LOM
OCP 3.0	1/10/25/40/100G network port with OCP 3.0 add-on card
Rear I/O	RJ45 1G 1 Port *1, Mini Display port, Micro USB Type-C, UID button with integrated LED,
ROT Module	I2C/I3C/GPIO connectivity to 'host Node CPUs' and BMC/CMC
	Runtime SPI and I2C/SMBus monitoring and filtering
Storage	M.2 2230 M-Key
	1 Micro-SD storage device, connected to BMC/CMC
Support	Supports Post code debug through on-board LCD display
External Device Support	Keyboard Mouse, LCD, DVD (R+W)
RAID	Hardware RAID flash cache; HBAs
GPU	Up to 3x double width 350W GPU and Up to 8x single width 75W GPU



PARAMETER	DESCRIPTION
NIC	X4, X8 and X16 FHHL and HHHL NIC support,
	Rj45 – 1G & 10G – Maximum 4 port support
	SFP+ – 10Gb/s Per Port , QSFP56 – 200Gb/s Per Port
Backplane	U.2/U.3 based connector for drive insertion
	Hot swappable
	LED management using UBM controller
Redundancy	1+1
Input Range	Full range AC (100 – 240 VAC)
Output Watts	800W/1600W/2700W
Efficiency	Titanium
Form Factor	2U Rack Mountable
BRAND	AMI / OpenBmc
OS/Hypervisor Supported	Compatible with VMWare, RHEL, SLES , MS Server, VM Essential, KVM, Docker, Ubuntu, windriver, Rakuten , XLOUD
Secure Boot and Root of Trust	TPM 1.0 and TPM 2.0
	UEFI Secure Boot
	Hardware root of trust (ROT)
	Bios Region Protection
Bios Security Control	Bios Administrative/ User Password
	BIOS Write Protection
	Anti-Rollback Protection
	Secure Bios Update
Logging, Audit & Compliance	Centralised event Login
	Times Stamp Audit Rails
	Remote syslog export
Secure Erase	AMI Secure Erase Utility for permanent data destruction
	Supports Secure Erase of:
	– NVMe SSDs
Standards Align Erase Methods	ATA Secure Erase
	Compliant Media Sanitization
AES Encryption Supports (AMI BIOS)	Advanced Encryption Standard (AES) Acceleration
	BIOS Enabled CPU-Level Cryptographic Instructions (AES-NI)
Secure Firmware Update	Digitaly Signed Firmware
	BIOS , CPLD, FPGA Update via BMC
	Secure Recovery & Rollback Protection

PARAMETER	DESCRIPTION
Security Dashboard & Reporting	Vulnerabilities Management System (VMS) for reporting & Patching Server Vulnerabilities
	Reporting of Out-dated BIOS/Drivers
	Server Management and Remote Update of System Software/Firmware
	Secure Web Dashboard
Protocol and API Support	Redfish (DMTF Compliant)
	Restful API
	IPMI 2.0
	SNMP V2/V3
Out of Band Management	Web-Based HTML UI
	Remote Power Control (On/Off/Reset)
	Remote KVM (Keyboard, Mouse, Video)
Monitoring & Telemetry	Real-time Monitoring of CPU, Memory, Fan and Power
	Threshold-based Alerts
	Sensor Data Records (SDR Supports)
User and Access Control	Role-Based Access Control
	LDAP/ MFA Support / Active Directory Authentication
	Configurable Password Policy
Remote Lifecycle Operations	BIOS Configuration via Redfish
	Remote OS Deployment
	One-click Factory Reset
	Automated Provisioning Support
Temperature control	FPGA Based PWM fan control
FAN	3 hot swap system 60x60mm fans, 60W
Operating Temp	5°C - 35°C (indoor)
Non-Operating Temp	-40°C - 70°C
Operating relative humidity	20% - 80%
Non-operating relative humidity	10% - 95%
RoHS 6/6 Complaint	Yes

KEY DIFFERENTIATORS

- **Scalability Redefined:** Adapt to increasing workloads with ease.
- **Efficient Performance:** DDR5 memory and AMD EPYC processors for optimal energy usage.
- **Future-Ready Design:** PCIe Gen5 compatibility for next-gen upgrades.
- **Versatility at Its Core:** Ideal for a wide range of enterprise applications, from virtualization to database management.

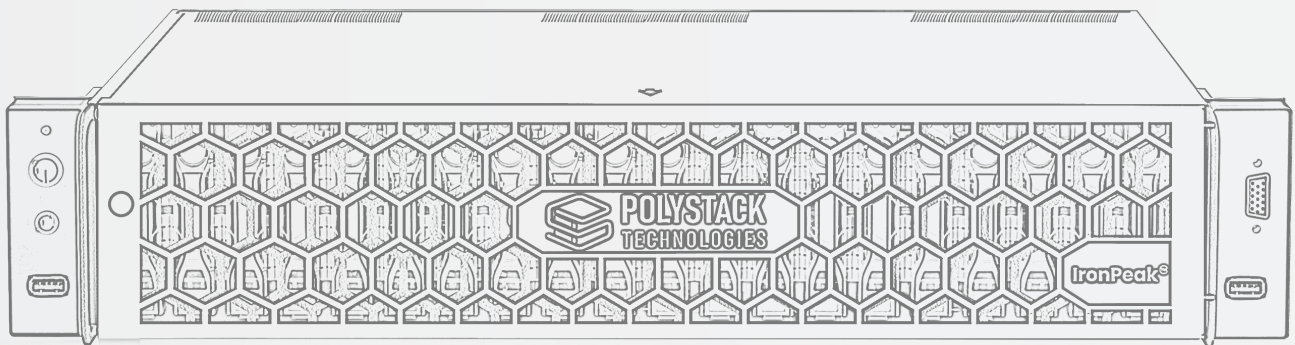
The **IP-AR-524-G** is the ideal solution for businesses that demand flexible, scalable, and powerful infrastructure to meet today's and tomorrow's challenges.



POLYSTACK
TECHNOLOGIES



Adaptability Meets Performance in Every Workload...



APPLICATIONS



**Artificial
Intelligence**



**High Performance
Computing**



**Data
Centers**



**Cloud
Computing**



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