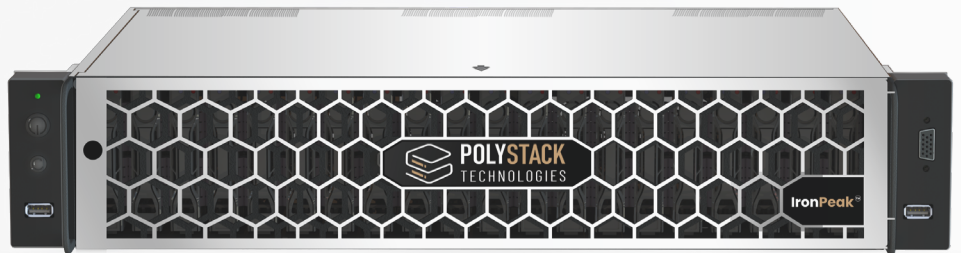


# IronPeak<sup>TM</sup>

**Revolutionize Efficiency and Adaptability**  
for Modern Enterprises.

## IP-AR-725-G



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

The IP-AR-725-G (5th 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 192 cores with dual AMD EPYC 9005 Series processors, delivering balanced performance and power efficiency for any workload.
- ▶ **Exceptional Memory Capacity**  
Supports up to 6TB 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

FEATURES	PARAMETER	DESCRIPTION
Processor	Supported CPU Series	Supports up to 2 processors of AMD EPYC 9005 Series (Generation 5)
		Min 8 Core – Max 192 Core per Processor (Boost clock Up to 5GHz)
	Thermal Design Power (TDP)	Up to 500W TDP, L3 CACHE - 512MB
Chipset	AMD	AMD EPYC™ TURIN
Front hard drive	Storage	Supports 24 x 2.5" drives
		(SATA Per port 7.68TB @ 6Gb/s)
		( NVMe per port 30.72TB) (M.2 per port 1.92TB)
		16 SATA + 8 NVMe / 24NVMe / 14 NVMe + 8 SATA
		24 – SATA with RAID CARD Support
		2 SLOTS of x1 PCIe Gen3 M.2 + 1 SLOT of x4 PCIe Gen3 M.2
Dimensions	W x H x D (mm)	450 x 88 x 780 / 35 KG
BMC Chip	ASIC	AST2600
Memory	Max DIMM slots	1 DIMMs/CH, 12 CH/CPU, Total 24 DIMMs
	DIMM type	DDR5 RDIMMs or LRDIMMs, Advance ECC Supportable
	Memory Capacity	16 GB / 32 GB / 64 GB / 128 GB / 256 GB, up to total 6TB capacity
	Memory Speed	Support upto 6400 MHz
	Memory Voltage	1.1V
External port & PCIe	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: 4 PCIe Gen5.0 full-height slots 1 PCIe Gen5.0 full-height Half Length slot OCP slot: 1 PCIe 3.0 x16, Mezzanine slot
Networking	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
DC_SCM	Rear I/O	RJ45 1G 1 Port *,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		
User Interface	Support	Supports Post code debug through on-board LCD display
	External Device Support	Keyboard Mouse, LCD, DVD (R+W)
External Cards	RAID	Hardware RAID flash cache; HBAs
	GPU	Up to 3x double width 350W GPU and Up to 8x single width 75W GPU
	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
Drive Control	Backplane	U.2/U.3 based connector for drive insertion
		Hot swappable
		LED management using UBM controller



FEATURES	PARAMETER	DESCRIPTION
Power Supply	Redundancy	1+1
	Input Range	Full range AC (100 – 240 VAC)
	Output Watts	800W/1600W/2700W/3200W
	Efficiency	Titanium
Chassis	Form Factor	2U Rack Mountable
BIOS/BMC	BRAND	AMI / OpenBmc
OS/Hypervisor	OS/Hypervisor Supported	Compatible with VMWare, RHEL, SLES , MS Server, VM Essential, KVM, Docker, Ubuntu, windriver, Rakuten
Security Features	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
		- SATA 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	Digitally Signed Firmware
BIOS , CPLD, FPGA Update via BMC		
Secure Recovery & Rollback Protection		
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	
Platform Management Features	Protocol and API Support	Redfish (DMTF Compliant)
		Restful API
		IPMI 2.0
		SNMP V2/V3



FEATURES	PARAMETER	DESCRIPTION
	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
Firmware & Lifecycle Management	Remote Lifecycle Operations	BIOS Configuration via Redfish
		Remote OS Deployment
		One-click Factory Reset
		Automated Provisioning Support
Intelligent temp. control	Temperature control	FPGA Based PWM fan control
System Cooling	FAN	6 hot swap system 60x60mm fans, 60W
Operating Environment	Operating Temp	5°C - 35°C (indoor)
	Non-Operating Temp	-40°C - 70°C
Humidity	Operating relative humidity	20% - 80%
	Non-operating relative humidity	10% - 95%
ROHS	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.

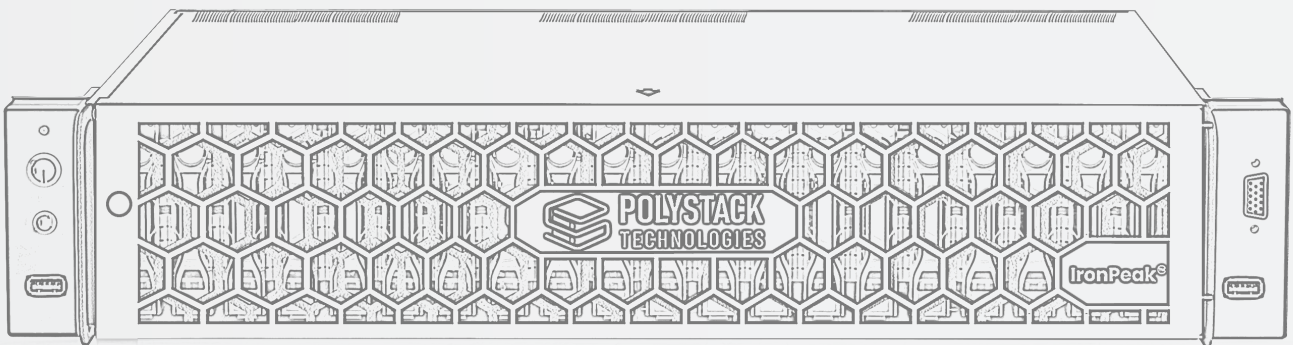
The **IP-AR-725-G** is the ideal solution for businesses that demand flexible, scalable, and powerful infrastructure to meet today's and tomorrow's challenges.



## AMD EPYC™ TURIN 9005 SERIES

Gen	Processor SKU	Total Cores	Total Threads	Base Frequency	MAX. BOOST CLOCK	L3 Cache	Default TDP	Memory Types	Max # of PCI Express Lanes
5th	AMD EPYC 9745	128	256	2.4	3.7	256	400W	Up to 6000 MT/s	128
5th	AMD EPYC 9755	128	256	2.7	4.1	512	500W	Up to 6000 MT/s	128
5th	AMD EPYC 9565	72	144	3.15	4.3	384	400W	Up to 6000 MT/s	128
5th	AMD EPYC 9655	96	192	2.6	4.5	384	400W	Up to 6000 MT/s	128
5th	AMD EPYC 9555	64	128	3.2	4.4	256	360W	Up to 6000 MT/s	128
5th	AMD EPYC 9575F	64	128	3.3	5	256	400W	Up to 6000 MT/s	128
5th	AMD EPYC 9535	64	128	2.4	4.3	256	300W	Up to 6000 MT/s	128
5th	AMD EPYC 9455	48	96	3.15	4.4	256	300W	Up to 6000 MT/s	128
5th	AMD EPYC 9365	36	72	3.4	4.3	192	300W	Up to 6000 MT/s	128
5th	AMD EPYC 9335	32	64	3	4.4	128	210W	Up to 6000 MT/s	128
5th	AMD EPYC 9355	32	64	3.55	4.4	256	280W	Up to 6000 MT/s	128
5th	AMD EPYC 9255	24	48	3.2	4.3	128	200W	Up to 6000 MT/s	128
5th	AMD EPYC 9375F	32	64	3.8	4.8	256	320W	Up to 6000 MT/s	128
5th	AMD EPYC 9475F	48	96	3.65	4.8	256	400W	Up to 6000 MT/s	128
5th	AMD EPYC 9275F	24	48	4.1	4.8	256	320W	Up to 6000 MT/s	128
5th	AMD EPYC 9645	96	192	2.3	3.7	256	320W	Up to 6000 MT/s	128
5th	AMD EPYC 9115	16	32	2.6	4.1	64	125W	Up to 6000 MT/s	128
5th	AMD EPYC 9135	16	32	3.65	4.3	64	200W	Up to 6000 MT/s	128
5th	AMD EPYC 9175F	16	32	4.2	5	512	320W	Up to 6000 MT/s	128
5th	AMD EPYC 9015	8	16	3.6	4.1	64	125W	Up to 6000 MT/s	128
5th	AMD EPYC 9825	144	288	2.2	3.7	384	390W	Up to 6000 MT/s	128
5th	AMD EPYC 9845	160	320	2.1	3.7	320	390W	Up to 6000 MT/s	128
5th	AMD EPYC 9965	192	384	2.25	3.7	384	500W	Up to 6000 MT/s	128

# Adaptability Meets Performance in Every Workload...



MANUFACTURED AT **VELANKANI**

## APPLICATIONS



Artificial  
Intelligence



High Performance  
Computing



Data  
Centers



Cloud  
Computing



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