

SKY-712E3

1U High Performance Server based on AMD® EPYC® 9005 Series Processor

Preliminary

OEM Business Only



Features

- 1U 31" deep rackmount server
- Single AMD® EPYC® 9005 series processor in SP5 socket (up to 160 cores)
- 12 x DDR5 RDIMM slots, max 3TB at 6400MT/s
- 2 x PCIe Gen5 x16 (FH | 3/4L)
- 1 x OCP3.0 Gen5 x16
- 16 x E3.S / 12 x U.2 NVMe drives
- 2 x NVMe 2280 M.2 drives
- Advantech-SCM leverages a DC-SCM modular architecture to deliver enhanced platform security and customizable Ethernet scalability for datacenter deployments
- IPMI 2.0-compliant management with reliability and security enhancements

Introduction

Introducing the SKY-712E3, designed to deliver exceptional computing power for modern data centers and edge environments. Powered by a single AMD EPYC 9005 series processor in SP5 socket with up to 160 cores, this system achieves superior performance per watt and maximized rack efficiency for highly parallel workloads. With 12 DDR5 RDIMM modules running speeds up to 6400MT/s, it manages intricate and memory-heavy tasks with ease, making it a perfect fit for intensive applications like network optimization, media broadcasting, data hubs, academic research, and high-performance computing (HPC) for large organizations.

The SKY-712E3 is built on an OCP-compliant open standard architecture, enabling seamless integration and cross-vendor interoperability for modern data centers and diverse IT environments. This storage solution leverages an all-NVMe design—supporting up to 16 E3.S or 12 U.2 drives—to optimize data access speeds and throughput. Designed for efficient large-scale workload processing, it is ideal for critical, data-intensive applications in the financial, medical, and tech industries.

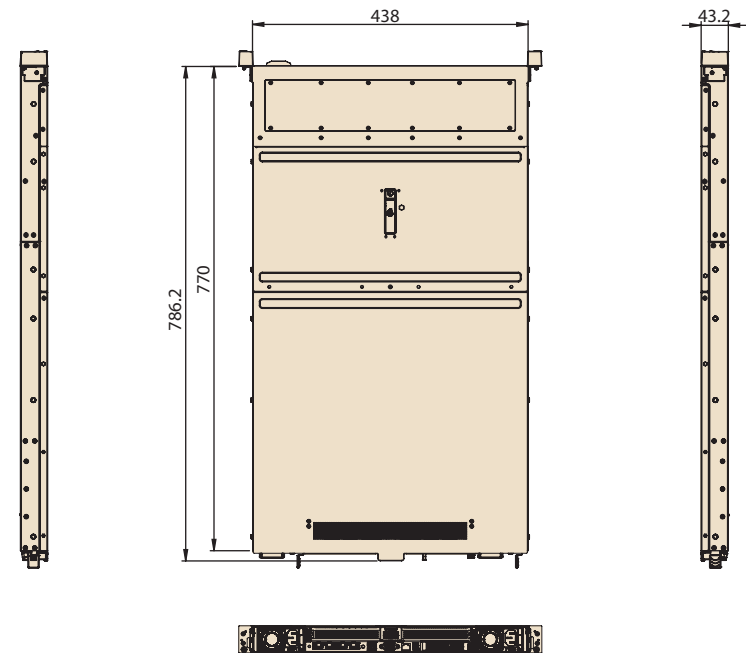
The system incorporates an optimized air cooling solution with 8 x 4056 hot-swappable fan modules for enhanced maintenance and airflow optimization, along with a dual-sided PSU configuration ensuring efficient thermal management for CPUs up to 400W TDP. Enhanced security is provided through IPMI 2.0-compliant management with AST2600 BMC, TPM 2.0, and chassis intrusion protection, ensuring your system remains secure and reliable.

Specifications

Processor System	CPU	Single AMD® EPYC® 9005 series processor in SP5 socket, CPU TDP up to 400W
Memory	Technology	DDR5 RDIMM slot, supports registered ECC DDR5 RDIMM only
	Max Capacity	Max memory up to 3TB at 6400MT/s (1DPC) 12 x DDR5 DIMM slots
	Socket	12 x 288-pin DIMM
PCIe	Expansion Slot	2 x PCIe Gen5 x16 (FH 3/4L)
		1 x OCP3.0 Gen5 x16
IO and LEDs	Front IO and LEDs	USB3.2 Gen1; Power button/LED; ID button/LED; Reset button; Status LED*
	Rear IO	ID button/LED; VGA; 2 x USB3.2 Gen1; RJ-45 Console; SW definable button; PSU fail LED
Ethernet	Management Interface	NC-SI (BMC to i210-AT); (Optional) NC-SI (BMC to E610)
	LAN	2 x RJ45 1 GbE / 2 x 10GBase-T; (Optional) 2x 10GBase-T + 2x 10GBase-T
	LAN Controller	1 GbE: Intel i210-AT / 10 GBase-T: Intel X710-AT2; (Optional) 2x 10GBase-T + 2x 10GBase-T : Intel E610 x2
Storage		16 x E3.S or 12 x U.2 PCIe Gen5 NVMe drive 2 x NVMe 2280 M.2 drive
Power Supply	Input	1600W 1+1 80 PLUS Platinum redundant power supply with PMBus; Titanium type CRPS optional
Environment	Humidity	Operational (non-condensing) 95%@40°C
	Operation Temperature	0°C (32°F) to 35°C (95°F)
	Storage Temperature	-40°C (-40°F) to 70°C (158°F)
Cooling	Chassis Fan	8 x 4056 hot-swap fan with SmartFan control
	Thermal Control	Three separate thermal zones for motherboard and PCIe cards
	Redundancy	Resilient to single fan failure
System Management	IPMI 2.0 and Redfish API	Aspeed AST2600 BMC with Advantech System Management Solution Advanced Lights Out Management compliant to IPMI 2.0 with security and availability enhancements iKVM Support Advantech Web GUI style Node Manager Configurable shared or dedicated NIC support TPM 2.0 Optional Secure Boot Chassis Intrusion Protection Cryptographically signed BMC firmware, optional signed BIOS firmware NIST.SP.800-193 Sustainable
Physical	Dimensions (W x D x H)	438.0 x 770.0 x 43.2 mm (17.2" x 30.3" x 1.7")
	Weight	~20 kg

Dimensions

Unit: mm



Front View

16 x E3.S PCIe Gen5 NVMe drive



12 x U.2 PCIe Gen5 NVMe drive



Rear View



Ordering Information

Part Number	Description
T.B.D.	T.B.D.

Optional Accessories

Part Number	Description
1700027928-01	Power cable 3P 180 cm, USA
1702002605	Power cable 3P 180 cm, Europe
1700000237	Power cable 3P 180 cm, JP
1700009652	Power cord 3P 180 cm, China
968DE00079	1U SKY-7 slide rail