



FEATURES

- ▶ One E5 1600 or E5 2600 Intel® Xeon® processor with four, six, or eight cores
- ▶ Up to 256 GB DDR3 ECC
- ▶ Eight 2.5 inch drive bays
- ▶ Two expansion slots

MECHANICAL INTEGRITY

- ▶ Designed for high reliability in harsh operating environments
- ▶ Specially coated aluminum for light weight and corrosion resistance
- ▶ Stainless steel reinforcement for strength and stiffness
- ▶ Optional dust filter

MANAGEMENT AND OPERATING SYSTEM

- ▶ Windows® and Linux® application support
- ▶ IPMI v2.0 support

ENVIRONMENTAL RESILIENCY

- ▶ Operating shock: 3 axis, 35G, 25ms
- ▶ Operating vibration: 3.0 Grms, 8 Hz to 2000 Hz
- ▶ Operating temperature: 0°C – Up to 50°C*
- ▶ Operating Humidity: 8% to 90% non-condensing
- ▶ Weight*: 15 lbs (6.8 kg)

MODULAR MAINTAINABILITY

- ▶ Power supply options
 - Single 110/220 VAC (50/60Hz, 400Hz)
 - Single 28 VDC
 - Single 18 VDC

MILSPEC*

- ▶ MIL-STD-810G, MIL-STD-901D, MIL-STD-167-1

* Themis designs all products to meet or exceed listed data sheet specifications. Some specifications are configuration dependant. Please contact Themis for information specific to your desired configuration requirements.

RES-mini Ruggedized Server

13.5 Inches Wide x 4 Inches High x 11 Inches Deep

OVERVIEW

Designed for use in demanding environments where Size, Weight, and Power (SWAP) are severely limited, the Themis RES-mini server combines the robust design of the RES Server family using the latest E5 1600 and 2600 Intel® Xeon® processors with four, six, or eight cores. Fully compatible with popular virtualization technologies such as VMware and Citrix XenServer, the RES-mini brings next generation technology to mission-critical military, industrial, and commercial applications.

OPTIMIZED FOR SWAP-C

Featuring two expansion slots, extensive high-speed I/O, and multiple storage options, the RES-mini server provides users with versatile configuration and system expansion options, and a strong, light-weight, coated aluminum chassis provides improved system resistance to corrosion.

The RES-mini also incorporates state-of-the-art thermal and kinetic management design. The addition of commercially available, off-the-shelf networking cards, graphics, I/O, peripherals, and other value-added options results in a system that has greater flexibility to meet current and future system requirements.



FIGURE 1. Themis RES-mini Server



FIGURE 2. Themis RES-mini Server (Front-Side View)



FIGURE 3. Themis RES-mini Server (Right-Side View)

TECHNICAL SPECIFICATIONS

Processor and CPU

PARAMETER	DESCRIPTION
Processor	One E5 1600 or E5 2600 Intel® Xeon® processor with four, six, or eight cores
Memory	Up to 256 GB DDR3 ECC

On-Board Expansion

PARAMETER	DESCRIPTION
Expansion slots	Two PCI-E 3.0 x 16 slot for low-profile, half length cards

Front Panel and Rear Panel Access I/O ^{Note 1}

I/O	QUANTITY	ACCESS
Removable 2.5 SATA or SAS disk drives	Up to 8	Front panel
Status LEDs	5	Front panel
Power switch	1	Front panel
Gigabit Ethernet ports (RJ45)	2	Side panel
USB 2.0 ports	4	Side panel
RS-232 serial ports (DB9)	1 standard	Side panel
Power connector	1	Side panel
VGA Graphics	1	Side panel

Environmental

PARAMETER	NON-OPERATING	OPERATING
Temperature range	-40°C to 70°C	0°C to 50°C ^{Note 2}
Humidity (non-condensing)	5% to 95% non-condensing	8% to 90% non-condensing
Shock	3 axis, 35G at 25 ms	3 axis, 35G at 25 ms
Vibration (10-2000Hz)	3.0 Grms, 8 Hz to 2000 Hz	3.0 Grms, 8 Hz to 2000 Hz

Modular Maintainability

PARAMETER	DESCRIPTION
Hot pluggable disk drives	8
Power supply options	Single 110/220 VAC (50/60Hz, 400Hz) Single 28 VDC Single 18 VDC

Mechanical

PARAMETER	DESCRIPTION
Dimensions	Height: 4 inches (102 mm) Width: 13.5 inches (343 mm) Depth: 11 inches (278 mm)
Weight ^{Note 3}	15 lbs (6.8 kg)
Chassis features	Coated aluminum for light weight and corrosion resistance Stainless steel in selected areas to add strength and stiffness Modular design for easy upgrade and service Optional rack-mount slides and shock pins Front to rear airflow

Notes

1. I/O options are configuration dependent.
2. Environmental specifications are configuration dependent. Higher operating temperatures are available in specially configured systems. Contact your Themis sales representatives for more information.
3. Weights are provided for typical configurations. Weight may vary depending on configuration. Contact your Themis sales representatives for more information.

INTEL® XEON® PROCESSOR E5 FAMILY

By 2015, it's estimated that more than 3 billion people and 15 billion devices will be connected to the Internet, and that each connected user will generate over 4 gigabytes of data traffic every day. This will increase the amount of data that needs to be stored by almost 50 percent per year.

To meet this growth, the number of worldwide cloud servers is expected to triple by 2015.

The industry faces formidable challenges in scaling data center infrastructure to meet the unprecedented demand for computing, storage, and network bandwidth, especially in the tactical cloud and at the tactical cloud edge. The new Intel® Xeon® processor E5 family addresses these challenges by enabling IT organizations to seamlessly scale their infrastructures for future needs.

The Intel Xeon processor E5 family addresses the incredible growth of connected users, devices, and data traffic in the cloud through record-breaking performance, exceptional energy efficiency, breakthrough I/O innovation, and built-in security features.

THE RES SERVER FAMILY

The Themis RES Server family features E5 Intel® Xeon® processors with four, six, or eight cores to provide reliability and superior server performance in the most demanding environments. The Themis rugged server design keeps mission-critical applications available and improves life-cycle management, at a substantially lower total cost of ownership. When the environment is tough and your data is critical, rely on Themis to protect it and keep it available.

THEMIS VALUE

Themis provides systems manufacturers and end-users with the most modern, best-of-breed computing resources available. Package and performance scale from small form factor embedded servers to bladed servers.

Themis listens, understands, and works closely with our customers to optimize computing solutions that are easy to integrate, yet inexpensive to own and operate. Our solutions achieve the right balance between standard commercial technology and requirements for rugged environments, optimizing space, weight, and performance. For more information on Themis products, visit www.themis.com.



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