

# Themis RES-XR5 1U

17" Deep, Front I/O Rugged Rack Mounted Server

- Up to E5-2600 v3/v4 Series Intel® Xeon® processors
- Up to 1TB DDR4 ECC Memory
- 2 PCIe 3.0 cards
- MIL-STD: 810G, 901D, 167-1, 461



A part of the *EnterpriseSeries™*, Mercury's Themis RES-XR5 1U server embeds dual E5-2600 v3/v4 Series Intel® Xeon® processors for applications such as signal intelligence, cryptography, AI, surveillance, sensor fusion, analytics, communications, and audio/video processing.

## Industry-Leading Performance

Featuring two E5-2600 v3/v4 Series Intel® Xeon® processors with up to twenty cores per socket, 1TB DDR4 ECC memory, and enhanced reliability features, the Themis RES-XR5 1U brings industry-leading technology to mission-critical military, industrial, and commercial applications.

Designed to meet systems engineering constraints at the edge, the system weighs only 20lbs and is 17" deep. A robust array of high speed I/O, storage options, and expansion choices allow users maximum flexibility for current and future system requirements. Servers can be mounted in standard commercial racks or in mobile rugged transit cases.

## Enhanced Reliability

Mercury's Themis RES-XR5 incorporates advanced thermal and mechanical design features to provide superior resilience to shock, vibration, dust, sand, corrosion, and temperature extremes. The system meets or exceeds military environmental specifications and is proven to perform reliably under stress and in harsh environments. Dual redundant, hot swappable AC or DC power supplies provide high availability while lightweight aluminum chassis with stainless steel reinforcement provide corrosion resistance.

## Uptime for Critical Workloads

Our EnterpriseSeries RES Servers are trusted worldwide for their high-performance, long life cycles, thermal resiliency, compatibility with industry standards, and SWaP optimization. With the latest Intel core-count processors and configurable I/O, RES servers are ideally suited to next-gen ground radar, mission, advanced simulation, command, control, and battle management processing mission critical applications.

## Your Reliable Teammate

With over 30 years of technical expertise, Mercury Systems works closely with customers to design computing solutions that are easy to integrate, affordable, and reliable for years to come.

*Mercury Systems is a leading commercial provider of secure sensor and safety-critical processing subsystems. Optimized for customer and mission success, Mercury's solutions power a wide variety of critical defense and intelligence programs.*



ACQUIRE



DIGITIZE



PROCESS



STORAGE



EXPLOIT



DISSEMINATE



## Technical Specifications

2 Intel® Xeon® E5-2600 v3/v4 Series CPUs with up to 20 cores per processor  
Up to 1TB DDR4 ECC memory

## Management and Operating System

Windows®, Linux®, VMWARE®, Citrix XenServer and other hypervisors  
IPMI v2.0, Redfish option available  
TPM 1.2 or 2.0 Support

## Input/Output Versatility

### Front Access

- 1 Serial Port
- 2 1GBaseT or 10GBaseT Ethernet ports (RJ45)
- 4 USB 3.0 minimum
- 1 IPMI 2.0
- 1 VGA graphic port
- 1 Power switch

## Expansion and Modular Maintainability

- 2 PCIe 3.0 expansion slots
  - 1 PCIe 3.0x16 full-height card
  - 1 PCIe 3.0x8 half-height card
- 6 Removable fans

## Additional Options

- Shock pins
- Front door filter
- Slide rails

## Power Supply Options

Single or redundant 100/240V VAC (50/60Hz, 400Hz)  
Single or redundant 10-36 VDC, 32 Amps  
Single or redundant 36-72 VDC, 18 Amps  
MIL-STD 461

## Environmental\*

Operating  
Temperature: 0°C to 50°C  
Extended temperature: -15°C to 65°C  
Humidity: 8% to 95% (non-condensing)  
Shock: 3 axis, 35g, 25ms  
Vibration: 4.76Grms, 10Hz to 2000 Hz (SSD)  
Non-Operating:  
Temperature: -40°C to 70°C  
Humidity: 5% to 95% (non-condensing)

## Mechanical

Height: 1U or 1.75" inches (44.45mm)  
Width: 17 inches (432mm)  
Depth: 17 inches (432mm)  
Weight (Typical)\*: 20 pounds (9.1kg)  
19" rackmountable

\* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight, and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.



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