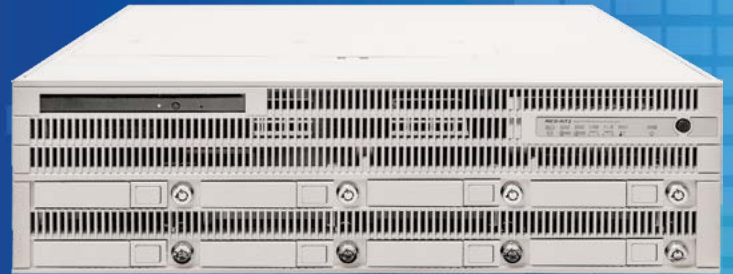# Themis RES-NT2 3U

mercury systems™

21″ deep, 8 drive, rear I/O rugged rack mounted server

- **Up to four NVIDIA® Tesla® or Quadro® GPGPUs**
- **Up to two E5-2600 v3/v4 Series Intel® processors**
- **Up to 1TB DDR4 ECC memory**
- **Up to 240TB of storage and 7 PCIe 3.0 cards**
- **MIL-STD: 810G**

A part of the *EnterpriseSeries*™, Mercury's Themis RES-NT2 3U server employs the latest NVIDIA® GPUGPUs to accelerate compute-heavy mission-critical applications such as signal intelligence (SIGINT), cryptography, deep learning, Artificial Intelligence (AI), surveillance, sensor fusion, visualization, image processing, tracking, and big data analytics.

Accelerated Cloud Computing

Featuring up to **two E5-2600 v3/v4 Series Intel® processors**, **1TB DDR4 ECC memory**, **240TB of storage** in **eight disk drives**, expansion slots, and enhanced reliability features, the RES-NT2 3U delivers superior workload-optimized performance for current and future system requirements.

Designed for the Field

Optimized for size, weight, and power (SWaP), the system weighs only **45lbs**, is **21″ deep**, and meets military environmental specifications. **Dual redundant**, hot swappable AC or DC power supplies provide high availability while advanced thermal and mechanical design features to provide superior resilience to shock, vibration, dust, sand, and temperature extremes.

Supercomputing and AI

Designed for artificial intelligence, deep learning, and simulation applications, the RES-NT2 with NVIDIA Tesla delivers record speeds for video and signal processing, simulation, modeling, and computational physics. With teraflops of single and double precision performance, NVIDIA Tesla computing accelerators are the world's fastest and most efficient high-performance computing companion processors.

Virtualized Cloud Computing

Fully compatible with popular virtualization technologies, the RES-NT2 with NVIDIA Quadro and vGPU software enables multiple virtual machines to have direct access to high performance graphic processing such as 3D visualization, visual simulation, and virtual reality.

Proven Performance and Reliability

Mercury's EnterpriseSeries RES Servers are trusted worldwide for their high-performance, **long life cycles**, thermal resiliency, compatibility with industry standards, and **SWaP optimization**. 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.

www.mrcy.com/servers

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® E5 2600 series Xeon® v3/v4 processors with up to 18 cores per processor

Up to 4 double slot NVIDIA Tesla or Quadro GPU accelerators

Up to 1TB memory with 16 DIMM slots, 2400MHz

Management and Operating System

Windows®, Linux®, VMWARE® and other hypervisors

IPMI v2.0, Redfish option available

TPM 1.2 or 2.0 support

Onboard RAID controller

  supports SAS3/HBA controller or SATA drive onboard controller

Expansion and Modular Maintability

2 Disk on Module (up to 128GB per DOM)

7 PCIe 3.0 card options:

  4 PCIe x16 GPU slots + 2 PCIe x8 (in a x16 slot) + 1 PCIe x4 (in a x8 slot)

Input/Output Versatility

Front Access

  8 removable, hot pluggable drives, 2.5" SATA/SAS3, U.2 NVME option available

  1 power switch

Rear Access

  2 1GBaseT Ethernet Ports (RJ45)

  4 USB 3.0

  1 IPMI 2.0

  1 VGA graphic port

Power Supply Options

Single or Redundant 100/240V VAC (47/63Hz, 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)

Additional Options

Shock pins

Front door filter

Slide rails

Mechanical

Height: 3U or 5.25" inches (133.35mm)

Width: 17 inches (433.3mm)

Depth: 21 inches (530mm)

Weight (Typical)*: 45 pounds (20.4kg)

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.

NVIDIA PREFERRED OEM

mercury systems™

INNOVATION THAT MATTERS ™

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