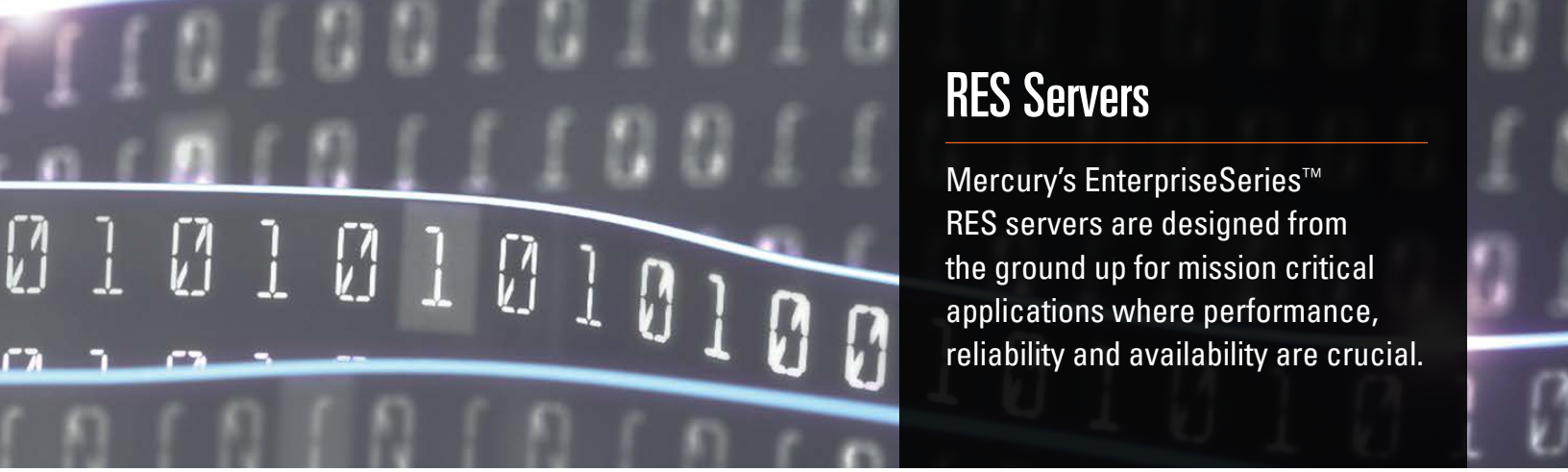
mercury systems™

EnterpriseSeries™ Server Product Guide

Rugged servers with industry-leading performance and reliability



RES Servers

Mercury's EnterpriseSeries™ RES servers are designed from the ground up for mission critical applications where performance, reliability and availability are crucial.

Dedicated to providing reliable computing platforms that maximize performance for military, aerospace, energy and rugged commercial use; our systems feature leading-edge components such as Intel and AMD processors, NVIDIA graphic cards and Mellanox switches while providing superior resilience to shock, vibration and temperature extremes.

COTS Technology

Rapid and affordable adoption of leading commercial technologies to deliver cutting-edge performance.

Enhanced Reliability

Proven performance and availability in the most strigent environments.

Size, Weight and Power (SWaP)

Specialty packaging designed to meet systems engineering constraints at the edge.

Composability

Built in composability to give you what you want in a more cost effective purchase.

Security

Security that can be integrated as the threat dictates with "built in" not "bolted on" secure solutions.

Lifecycle Obsolescence Management

After sale support for obsolescence management at product EOL for current and future deployments.

Interoperability

Seamless integration of applications and software across multiple platforms.

Simplified Logistics and Upgrades

Modular systems that relieve the challenges and costs associated with logistics and upgrades.

Extensive Customer Market Experience

Over three decades of experience in delivering reliable solutions best suited to customer needs.

Quick Turnaround

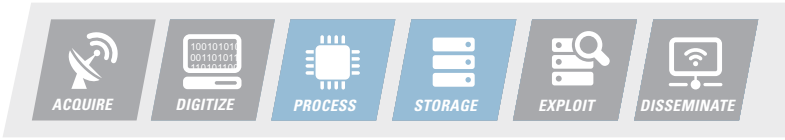
Dedicated technical support and faster or equal lead times comparable to other well-known competitors.

Built to Specification

Systems that meet military, IEC and TEMPEST reliability requirements.

Modified Expertise

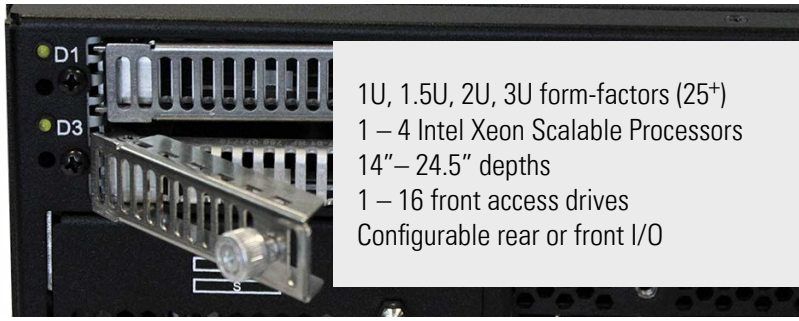
Unique customer design expertise with patented technologies and enhancements.



EnterpriseSeries™

Computing at the Edge

RES-XR6

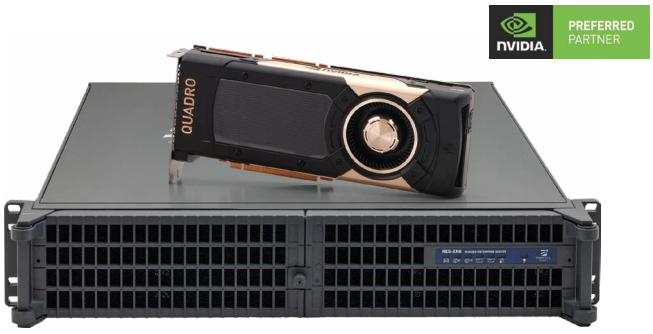


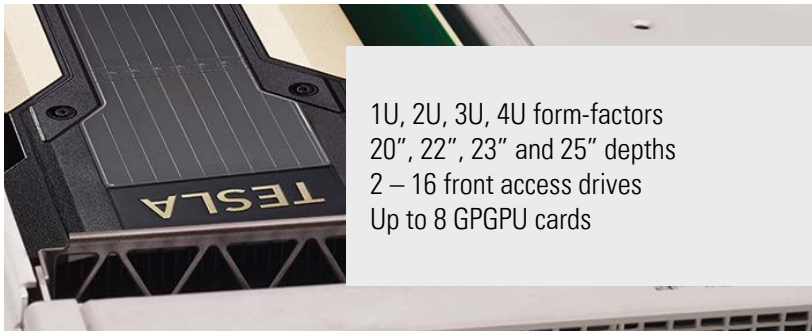
1U, 1.5U, 2U, 3U form-factors (25+)
1 – 4 Intel Xeon Scalable Processors
14"– 24.5" depths
1 – 16 front access drives
Configurable rear or front I/O

RES-XR6 rackmount servers package the latest Intel Xeon Scalable processors and 2666MHz DDR4 ECC memory in resilient, reliability-enhanced and lightweight form-factors. Featuring expansion slots, multiple sizes and depths, rear or front high-speed I/O, patented technologies, security features and various storage options, RES-XR6 servers provide users maximum system expansion and configuration flexibility to meet current and future system requirements.

Supercomputing, Artificial Intelligence and Virtualization

RES-NT2





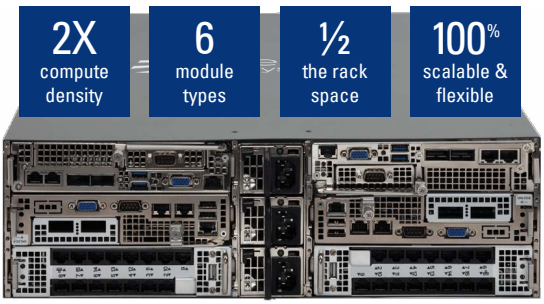
1U, 2U, 3U, 4U form-factors
20", 22", 23" and 25" depths
2 – 16 front access drives
Up to 8 GPGPU cards

Equipped with the latest NVIDIA® GPU accelerators, RES-NT2 tackles the most difficult challenges with efficiency, achieving up to 40% higher compute capacity per rack. These robust processing engines increase throughput and accelerate applications—packaging multiple GPUs, the latest Intel server-class processors, and up to 1.5TB of DDR4 memory in a smaller footprint. Tesla® GPGPUs and NVIDIA® Quadro® GPUs complement the CPU by offloading parallelized tasks, supporting the extreme compute demands of virtualization, graphics processing, and scientific computation. RES-NT2 delivers dramatic performance for the most aggressive mission critical workloads.

RES-XR6 and RES-NT2 environmental compliance: MIL-STD 810G, 901-D, 167-1, 1474D, 740-2 and 461F

Modular and Composable High Density Servers

RES HD



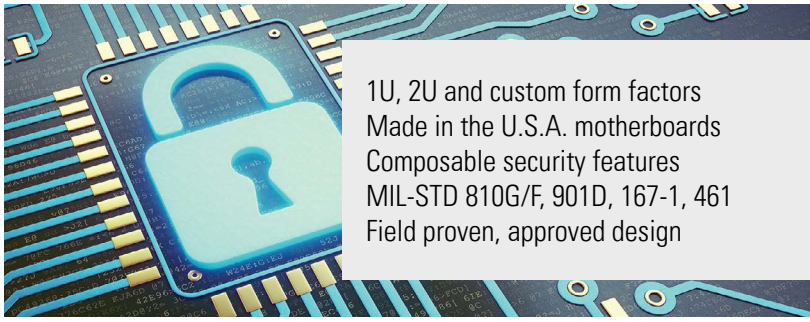
MIL-STD 810G, 461F
Configurable rear or front I/O
2666MHz DDR ECC memory
6+ interchangeable modules
5 chassis options

Delivering high-compute density and low-latency access, composable RES HD servers save space, simplify technology upgrades and streamline logistics with over six "plug and pull" compute, storage, networking, PCIe expansion, management and GPGPU modules. Chassis options include the 9.9" wide HDslim and 17" wide RES-HD 2U/3U chassis that integrate the latest Intel Xeon Scalable processors. The 10" deep HDversa holds up to twelve low-power Intel Xeon D processors.

Trusted and Secure Computing

RES Trust

BuiltSECURE™



1U, 2U and custom form factors
Made in the U.S.A. motherboards
Composable security features
MIL-STD 810G/F, 901D, 167-1, 461
Field proven, approved design

Employing U.S. designed and manufactured motherboards with embedded Intel® processors and composable built-in physical and cyber security framework, RES Trust delivers trusted performance for the most security-imperative mission critical applications. DMEA-accredited facilities employ trusted personnel and utilize a managed supply chain; minimizing the risk of back doors, counterfeits, and trojans. Systems can be configured with a variety of nation-state level security features that enable customer Foreign Military Sales (FMS) or Direct Commercial Sales (DCS) program success.

Datacenter in a Briefcase

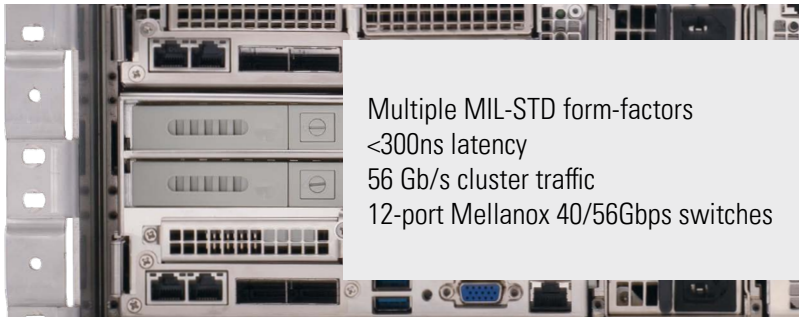
RESmini XR6, Toughbox

Mobile, small form-factors
MIL-STD 810G, 901-D, 167-1
6 – 8 hot swappable drives

A tactical cloud that can host sensitive missions in theater and operate on almost any power source, the RESmini XR6 packages up to 240TB of storage and one Intel Xeon scalable processor in a 6.8kg small form-factor. The RESmini's optional FAA compliant UPS power case provides over 100 minutes of autonomous operation. Featuring an Intel Xeon D-2183IT processor, 128GB DDR4 memory, and up to 180TB flash storage, the 4kg Toughbox can operate on +9VDC to +28VDC and has vehicle auto sense protection. With an operational temperature range of -20°C to +65C, the mobile server requires under 100W of power.

Hyperconverged Infrastructure (HCI) Platforms

Hyper-Unity

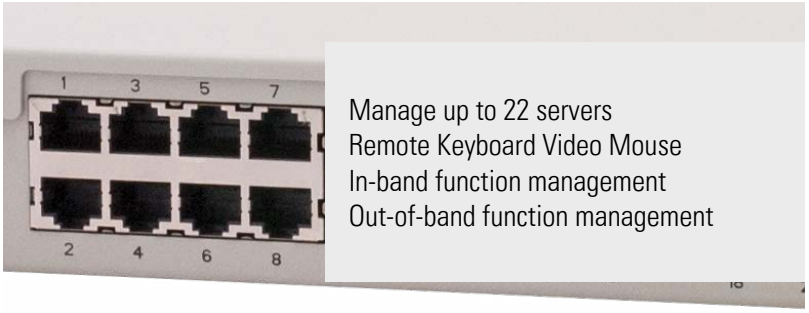


Multiple MIL-STD form-factors
<300ns latency
56 Gb/s cluster traffic
12-port Mellanox 40/56Gbps switches

Hyper-Unity® seamlessly integrates multiple RES form-factors and software-defined storage(SDS) to deliver all-flash performance for virtualized applications at less than half the cost of traditional storage. It brings the advantages of hyper-converged infrastructure (HCI) to operations on the tactical edge—optimizing efficiency through dynamically provisioned resources, streamlining IT management and providing a robust scalable and turn-key infrastructure that can be immediately deployed.

Resource Management

Resource Manager



Manage up to 22 servers
Remote Keyboard Video Mouse
In-band function management
Out-of-band function management

Remotely administer, monitor, configure and manage servers securely with the Mercury Resource Manager. Monitor system health with insights into CPU utilization, memory usage, storage capacity, network activity, power, and cooling. Remote Keyboard Video Mouse (KVM) enables users to access system BIOS and OS on a remote PC, laptop, or phone.

Innovation That Matters.

Rely on Us

Trusted worldwide, Mercury has a 30-year track record of providing enhanced-reliability computing platforms for mission-critical applications. Our robust product lines are known for their long life cycles, high-performance, thermal resiliency, compatibility with industry standards and SWaP optimization. We partner with customers to design solutions that they can rely on for years to come.

Committed to Quality

Mercury practices total quality management (TQM) in all areas of our business, from engineering and manufacturing to customer service. Our AS5553 compliant, AS9100D and ISO9001 facilities maintain quality and compliance to meet customer expectations.

For more information visit: mrcy.com/servers

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INNOVATION THAT MATTERS™

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