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THE EMBEDDED EDGE

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 mercury  
systems™



## EnterpriseSeries™ Server Product Guide

*Rugged servers with industry-leading performance and reliability*



# RES Servers

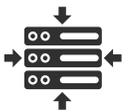
Mercury's EnterpriseSeries™ RES servers are designed from the ground up for mission critical applications where performance, reliability and availability are crucial.

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.



## Size, Weight and Power (SWaP)

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



## Security

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



## Interoperability

Seamless integration of applications and software across multiple platforms.



## Extensive Customer Market Experience

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



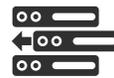
## Built to Specification

Systems that meet military, IEC and TEMPEST reliability requirements.



## Enhanced Reliability

Proven performance and availability in the most stringent environments.



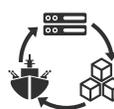
## Composability

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



## Lifecycle Obsolescence Management

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



## Simplified Logistics and Upgrades

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



## Quick Turnaround

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



## Modified Expertise

Unique customer design expertise with patented technologies and enhancements.



ACQUIRE



DIGITIZE



PROCESS



STORAGE



EXPLOIT

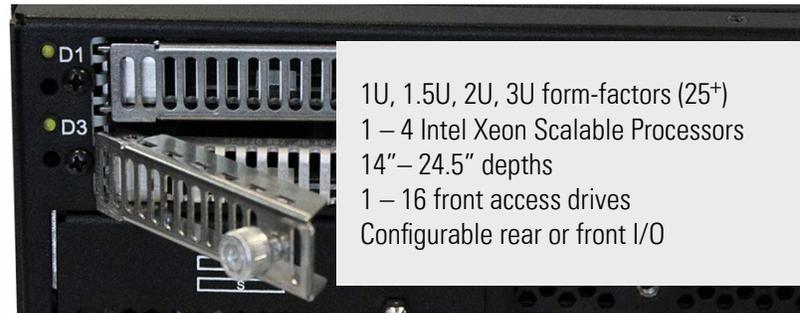


DISSEMINATE

# 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 AI



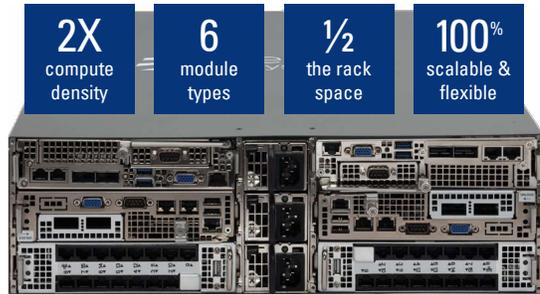
- 1U, 2U, 3U, 4U form-factors
- 20", 22", 23" and 25" depths
- 2 – 16 front access drives
- Up to 8 GPGPU cards

Leveraging the latest processing, co-processing, and accelerator technologies, RES AI brings High performance computing (HPC) to defense and IOT applications at the edge. Powered by Intel® Xeon® Scalable processors and multiple NVIDIA® Volta, Pascal™ and Turing™ architecture GPUs, servers harness parallel processing to maximize throughput, boost productivity and push the boundaries of compute-heavy applications. Multiple expansion slots support specialized capabilities while shallow, densely packed chassis maximize performance in a small footprint.

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

# Modular and Composable High Density Servers

RES HD



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



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, RES Edge



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 E5-2600 v4 Series processor, 128GB DDR4 memory, and up to 240TB of storage, the 4kg RES Edge can operate on +9VDC to +28VDC and features vehicle power auto-sense and surge protection technology. With an operational temperature range of -20°C to +65°C, the low-power mobile server ensures uptime and availability in any environment.

# Fanless Airborne Servers

## RES Aero

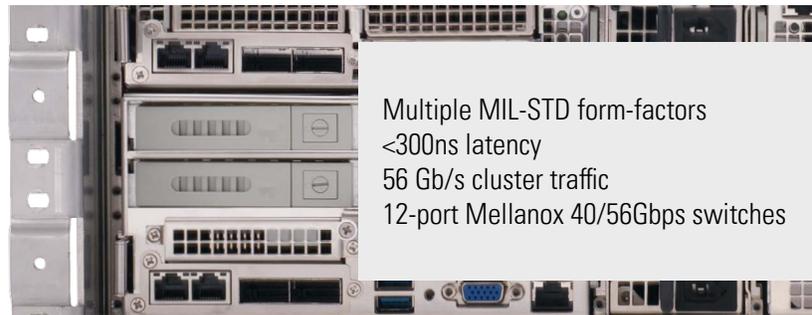


Operates in high-altitudes  
Customizable to fit any aircraft  
Certified to NAVAIR MIL-STDs

Designed to fit in onboard plenum enclosures, RES Aero servers provide high-performance computing without added fans. A complete fanless design produces less noise and enables operation at high altitudes, even during loss of cabin pressure, while a flexible power-supply, featuring standardized connectors, supports unique airborne platform voltage requirements. Certified to NAVAIR MIL-STD 461 for Electromagnetic Interference (EMI) and multiple environmental specifications, RES Aero servers are a cost-effective and flexible solution for your airborne platform.

# 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.



## *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](http://mrcy.com/servers)



*INNOVATION THAT MATTERS™*

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