RES Edge XR5

8 Drive Rugged Small Form-Factor Server

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.

Customizable to any Application or Platform

PCIe expansion slot maximizes scalability to support unique application workloads. Hardware and firmware management extends system longevity by ensuring delivery of the same configuration over multiple years. Additional features, testing, and certifications are available upon customer request.

Proven Performance

Mercury’s EnterpriseSeries 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, servers are ideally suited to next-gen 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.

Our AS5553 compliant, AS9100D and ISO9001 facilities maintain quality and compliance to meet customer expectations.

Mercury’s EnterpriseSeries RES Edge accelerates space-constrained mission-critical applications at the edge by densely packing one Intel® Xeon-D® processor and multiple storage drives in a small footprint.

Space Optimized Performance

Built for space and power-limited mobile platforms, the 9lb RES Edge integrates up to one 1500 Series Intel® Xeon-D® processor, 128GB memory, eight swappable drives and enhanced reliability features in a 9” transportable chassis.

A low-power solution that can operate on an external 12VDC power source or car battery, the RES Edge features vehicle power auto-sense and surge protection technology that prevents battery drainage and assures safe system shut-down.

Enhanced for Extreme Environments

To ensure uptime and availability in any environment, the RES Edge incorporates innovative mechanical and design features to withstand 30Gs of shock, continuous vibration, dust, sand, and temperature extremes. It accelerates performance in extended 0°C to +65°C temperature environments and is certified to multiple military (MIL-STD) environmental specifications.

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Technical Specifications
One Intel® Xeon-D® 1500 series CPU with up to 16 cores**
Up to 128GB DDR4 ECC Memory
Other Mini ITX motherboards available upon request

Management and Operating System
VMware® vSphere
Microsoft® Windows 7®
NetApp® ONTAP Edge®
Linux

Expansion and Modular Maintainability
Up to 1 standard height, half-length PCIe 3.0 x16 cards
2 Fixed Fans

Input/Output Versatility
Front Access
8 Removable, Hot Pluggable, 2.5” SATA/SAS3 drives
  - can configure with up to (4) 15mm or (6) 9.5mm or (8) 7mm (SATA) high drives
    (rear access option available)
3 USB 3.0 or 2.0 (optional)
1 Power Switch
1 CD-RW/DVD-RW Drive, Blu-Ray Option (rear access option available)
1 Quick Change Battery

Rear Access
2 10GBaseT Ethernet Ports (RJ45)
1 IPMI 2.0
1 VGA Graphic Port
2 1GBaseT Ethernet Port (RJ45)
2 USB 3.0

Power Supply Options
12 VDC (range from +9 to +28 VDC)
  - Auto sense and surge suppression included

MIL-STD / Industrial Specifications
MIL-STD 810G
Shock: MIL-STD 901D Grade A, IEC 60068-2-27
EMI/RFI: MIL-STD 461F, CE102 standard
Airborne Noise: MIL-STD 1474D
Temperature: IEC 60068-2-2 test Bb, 60068-2-1 test Ab

Environmental*
Operating
  - Temperature: 0°C to 65°C
  - Humidity: 8% to 95% (non-condensing)
  - Shock: 30Gs @ 20msec 1/2 sine on 6 axis
  - Vibration: 1.28G .85 Grms and Method 514.6 category 4
  - Altitude: 10,000 ASL
Non-Operating
  - Temperature: -40°C to 70°C
  - Humidity: 5% to 95% (non-condensing)
  - Altitude: 40,000 ASL

Mechanical
  - Height: 4.5 inches (114.3 mm)
  - Width: 9 inches (228.6 mm)
  - Depth: 8.5 inches (215.9 mm)
  - Weight (Typical)**: 9 pounds (4.1kg)
  - Dip brazed aluminum chassis

* 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.

** Additional CPU options available. Contact Mercury Systems for more information.

Modified COTS Expertise
For customized space, environmental, and performance requirements email tms@mrcy.com