DATASHEET

RES AERO XR5 2U

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

- **Up to two Intel® Xeon® E5-2600 v4 processors with 22 cores**
- **Up to 2TB DDR4 ECC Memory**
- **Up to 4 PCIe 3.0x8 cards**
- **MIL-STD: 810F/G, 461F/G, 704F/G (NAVAIR)**
- **Manufactured in AS5553 compliant, AS9100D facilities**

A part of the *EnterpriseSeries*™, Mercury's fanless RES Aero 2U Server employs Intel® Xeon® E5-2600 processors to silently accelerate compute intensive workloads for airborne applications such as surveillance, signal intelligence, sensor fusion, and audio/video processing.

Reliable Performance and Versatility

Featuring up to **two Intel® Xeon® E5-2600 v4 processors**, **2TB DDR4 ECC memory**, expansion slots, and enhanced reliability features, RES Aero 2U delivers superior workload-optimized performance and hardware-enhanced security. Advanced thermal and mechanical design features provide superior resilience to shock and vibration. Hardware and firmware management ensures delivery of the same server configuration over multiple years.

Space Optimized for Airborne Environments

Fitted to pre-existing onboard plenum enclosures, the completely fanless **24lb, 20"** deep RES Aero not only saves space but also functions at high altitudes, even during loss of cabin pressure. The system has passed NAVAIR MIL-STD 461 for EMI and meets multiple military environmental specifications.

Enhanced for the the Field

The system includes patented memory stabilization technology to prevent disconnect during system shock and vibration. A flexible power-supply, featuring standardized connectors supports unique voltage requirements such as 270VDC to enable deployment in a wide array of platforms. Additional features, testing, and certifications are available upon customer request.

Proven Performance

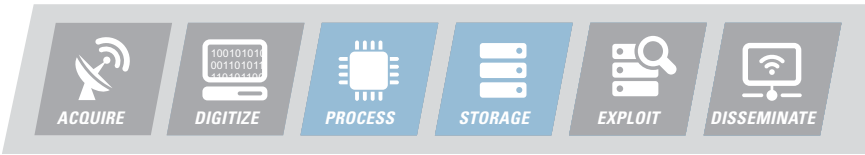
Mercury's EnterpriseSeries RES Servers are trusted worldwide for their high-performance, **long life cycles**, thermal resiliency, compatibility with industry standards, and **SWaP optimization**. With the latest Intel core-count processors and configurable I/O, RES servers are ideally suited to next-gen 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 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.



Modified COTS Expertise

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

Technical Specifications

2 Intel® Xeon® E5-2600 v4 series CPUs with up to 22 cores per processor

Up to 2TB 2666MHz memory

Patented Technologies

Memory stabilization

Remote battery

Management and Operating System

Windows®, Linux®, VMWARE® and other hypervisors

IPMI v2.0, Redfish option available

TPM 1.2 or 2.0 Support

Expansion and Modular Maintainability

Up to 4 PCIe 3.0 x8 cards

Input/Output Versatility

Front Access

- 1 Power/Reset Switch
- 1 Power On LED
- 2 1GBaseT or 10GBaseT Ethernet Ports (RJ45)
- 1 IPMI 2.0 (RJ45)
- 1 VGA Graphic Port
- 4 USB 3.0

Power Supply Options

Front access, fanless, cold swappable 270VDC (+/- 135VDC), 625W

MIL-STD-704E aircraft power requirements for high voltage 270 VDC

MIL-STD-461E for aircraft, internal

High MTBF >13,000 hrs at 35C, airborne inhabited cargo environment

Additional Options

Slide Rails

CAC Card Reader

MIL-STD / Industrial Specifications

MIL-STD 810F/G

Shock: MIL-STD 810F/G

EMI/RFI: NAVAIR MIL-STD 461E, CE102 standard

Vibration: MIL-STD 810F/G

Temperature: MIL-STD 810F/G

Environmental*

Operating

- Temperature: 0°C to 50°C (in plenum enclosure)
- Humidity: 5% to 100% (non-condensing)
- Shock: 3 axis, 10g, 11ms or higher
- Vibration: 5Hz to 2000 Hz (SSD)
- Altitude: 11,000 ASL

Non-Operating

- Temperature: -40°C to 71°C
- Humidity: 5% to 100% (non-condensing)
- Altitude: 40,000 ASL

Conformal Coating: IPC-CC 830 (optional)

Mechanical

Height: 2U or 3.5" inches (87.8mm)

Width: 17 inches (433.3mm)

Depth: 20 inches (508mm)

Weight (Typical)*: Aluminum: 24lbs (10.89kg)

Cooling: requires Plenum cooled enclosure

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.

intel IoT Solutions Alliance

www.mrcy.com/servers

 6548.00E-0218-DS-RESAERO2UGRS2125 EXPID14456

mercury systems

INNOVATION THAT MATTERS ®

Mercury Systems
3680 Centerview Dr • Chantilly, VA 20151 USA
(703) 502-8890

Mercury Systems International
37-39 Avenue Ledru-Rollin • CS 11237
75570 Paris Cedex 12 • France
+33 608 419949