



RS253i Rugged 2U Server



- Mil-Spec Rugged
- 15" depth ideal for short racks
- Light weight
- High performance and reliability

Extraordinary power in a rugged compact 2U package

The RS253i represents a leap forward in reliable computing power in a rugged 2U package that supports up to two Quad-Core Intel® 64-bit Xeon® up to 3.2 GHz or up to two Dual-Core Intel 64-bit Xeon up to 3.4 GHz processors and provides up to 3 x front removable 2.5" SATA HDDs (currently up to 500 GB per drive). Other features include a slim line optical drive (DVD-RW or CD-RW), flash drive, an hour counter (facilitating reliability assessments), front panel USB ports, a programmable LCD, and a high reliability recessed membrane switch for power and reset. The plated aluminum enclosure, 1/2" machined aluminum front panel, and proprietary drive sled design ensures that the system will survive severe shock and vibration environments. With optional solid state hard drives, the unit will operate reliably in even the most severe propeller driven vibration profiles.

The RS253i is developed using the best in class Supermicro® motherboards and high quality memory, drives, and power supply. It is delivered with an industry best full 3 year warranty.

Key Features

- plated aluminum enclosure
- 1/2" thick machined aluminum front panel
- 4 captive mounting screws
- stainless steel fasteners
- proprietary drive sled design
- Mil-Spec EMI compliant enclosure design
- drop down drive access door
- 3 high CFM, low noise chassis fans – front to rear cooling
- CPUs include heat sink and fan

RS253i Detailed Specifications

Feature	Specification
Physical	
Dimensions	3.47" (8.81 cm) H x 17" (43.18 cm) W x ~15" (38.10cm) D – see mechanical ICD for detailed dimensions (rack mount rails included)
Weight	~18 lb. (configuration dependent)
System	
Motherboard	Supermicro X7 series 1333/1066/667 MHz FSB – dual 771-pin LGA sockets
CPUs Supported	Up to 2 Intel® 64-bit Xeon® Dual-Core 3.4 GHz processors or Up to 2 Intel® 64-bit Xeon® Quad-Core 3.2 GHz processors
Memory Capacity	Supports up to 48 GB 667 / 533MHz DDR2 ECC FB-DIMM memory in 6 x 240 pin DIMM sockets (motherboard dependent)
Hard Drives	Up to 3 x SAS 3.5" SATA Drives with on board RAID 0,1,5,10 Support
Optical Drive	1 x Slim Line CD-ROM or RW DVD/CD
Graphics	XGI Volari™ Z7 PCI-E Graphics Processor or ATI ES1000 controller with 16 MB of video memory depending on motherboard selection
Network Controllers	Two Intel® (ESB2/Gilgal) 82563EB Single-Port Gigabit Ethernet Controllers – supports 10/100/1000 BASE-T, RJ45 Output
Input/Output	All X7 series motherboard standard I/O available – USB, VGA, LAN, Serial etc.
Expansion Slots	Depending on Motherboard option up to 3 x full height PCI-X or PCI-e slots in various combinations
Environmental	
Temperature	Mil-STD-810F Method 501.4 and Method 502.4: Operating: 0-40, 45 or 50 degrees C (depending on number and type CPUs) Non-operating: -40 to +70 degrees C
Humidity	Method 507.3 5% to 95% non-condensing; condensing with conformal coat option
Shock	Mil-S-901D Grade B, or Grade A with optional solid state drives Mil-STD 810F 20 g 11 ms ½ sine operational, 30 g 11 ms ½ sine non-op
Vibration	Mil-S-810F Method 514.4 Basic Transportation; Operational: Fig. 514.4-7 for propeller driven aircraft (with optional solid state hard drives), Fig. 514-5C-15 random vibration for shipboard applications; Mil-STD-167-1 Sinusoidal Vibration for surface ship
EMI-EMC	Enclosure designed to Mil-STD 461E – COTS I/O connectors may limit full compliance; FCC Class B, Part 15
Altitude	Operating 15,000 ft.; Non-Op 40,000 ft.
Power	
AC	Standard - 100-240 VAC 50-60 Hz, 700 Watt Power Supply Option: 400 Hz Option with custom supply
DC	Option: 18-32 VDC with Optional Power Supply

