



# R5U

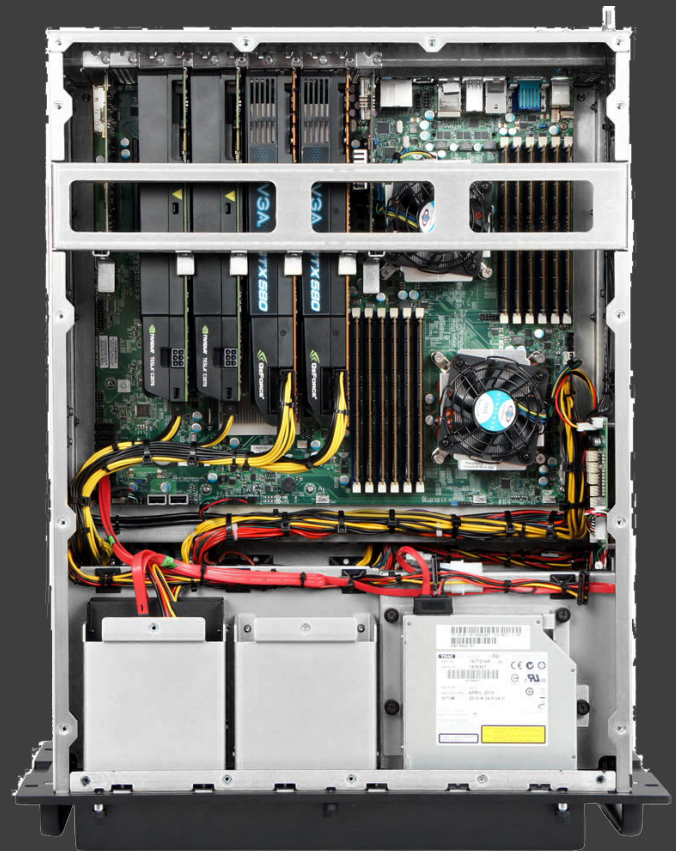
RUGGED  
RACKMOUNT  
5U COMPUTER

The R5U computer is an open platform that allows for hardware and software expansion by the customer. Giving the customer the ability to tailor the system to their specific requirements. The R5U offers a high power redundant power and RAID options for enhanced hard drive performance and data redundancy. The heart of this system is designed around a long-life system board using the new Intel Xeon Scalable CPUs and supports on board system memory over 1TB.

The R5U-HPC system has the capability to support up to 4x NVIDIA Tesla GPU's in a single package. The Tesla P100 GPU enables mixed-workload HPC data processing to realize a dramatic jump in throughput while saving on space, weight and power (SWaP). As example, a single GPU-accelerated node powered by four Tesla P100s interconnected with PCIe replaces up to 32x standard CPU based systems for a variety of applications. When comparing size, weight and power advantages, an HPC configuration is the clear winner!

## KEY FEATURES

- 5U rackmount form factor
- Support for PCI-Express expansion cards
- Support for 12 2.5" removable drives
- SysCool™ intelligent cooling system
- Ruggedized chassis and components



## Who We Are

CP Systems designs, fabricates and integrates standard and customized high-performance computing platforms and LCD monitors for military, industry, and commercial applications.

Using COTS components, CP Systems provides solutions for customers who need reliable systems that will operate in a variety of harsh conditions and who require revision control and hardware consistency for multi-year programs.

CP Systems is an ITAR Registered and ISO 9001:2015 Certified business that has been operating for over twenty years.

**Assembled in the USA**  
**ISO 9001:2015 Certified**  
**ITAR Registered**

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# TECHNICAL SPECIFICATIONS

<b>CPU</b>	Intel® Core and single/dual Intel® Xeon options available
<b>MEMORY CAPACITY</b>	Varies by configuration
<b>STORAGE</b>	4x shock isolated 3.5" drives
<b>OPTICAL DRIVE</b>	Slim Slot-Fed Optical Drive
<b>EXPANSION SLOTS</b>	Up to 4x full-height dual slot GPUs, Tailored Card Hold-Down System
<b>FRONT PORTS</b>	2x USB ports, optional memory card reader
<b>SYSTEM COOLING</b>	3x 120mm, 137 CFM, 80,000 hours MTBF cooling fans. Proprietary SysCool™ intelligent adaptive fan controller and temperature alarm circuit board
<b>MOTHERBOARD CAPACITY</b>	Designed for up to ATX-sized motherboard
<b>POWER SUPPLY</b>	Varies by configuration, single and redundant options available
<b>DIMENSIONS</b>	19" X 8.75" X 22" (482.6 x 222.25 x 558.8 mm)
<b>WEIGHT</b>	62 lbs (approximate weight. Varies with configuration)
<b>CONSTRUCTION</b>	Front Panel: 0.187" milled 5052-H32 aircraft-grade aluminum Enclosure Body: 0.062" 5052-H32 aircraft-grade aluminum Rear Slot Panel: 18 gauge CRS, zinc plated
<b>POWDERCOATING</b>	Black per MIL-PRF-24712, Type IV, Class 3, Cardinal C214-BK110 polyester semi-gloss, fine texture
<b>PLATING</b>	Chem-Film per MIL-C-5541F, Class 1A

## QUESTIONS?

Reach out to us at  
CP-Systems.Tech  
or call 858.571.4330

## ENGINEERED TO YOUR SPECIFICATIONS

- In-house engineering department
- Design and build of rapid prototypes. Experience with solving difficult customer application problems through knowledge of the industry and custom system design and manufacturing capability
- Our Engineers use Solid Works 3D CAD modeling software for mechanical design and thermal simulation
- Design experience with MIL-STD-167, MIL-STD-461, MIL-STD-810, and MIL-DTL-901, in addition to FCC, UL, CE, and country specific agency requirements

## FACILITY AND TEST

- All integration work is performed in a state-of-the-art, ESD-controlled facility
- Our facility has 23,000 sqft and has dedicated 12,000 sqft to manufacturing and 3,000 sqft to engineering
- Operate to anti-static standard ANSI/ESD S20.20-2007 and electronics assembly standard IPC-A-610, Revision E-2010

## REVISION CONTROL & CONFIGURATION MANAGEMENT

- Our Program Managers will assure your products are revision controlled for the life of the program
- Configuration Management to assure TAA Compliance and system compatibility
- One part number for life of the program
- Counterfeit and obsolescence management

## QUALITY COUNTS

- ISO 9001:2015 Certified
- 100% system inspection before shipment
- All integrated systems undergo a minimum 24-hour system test and burn-in before shipment to the customer
- Assistance with 3rd party verification of system specifications
- 5-year warranty on all servers and 3-year warranty on LCD monitor products
- TAA compliant
- Built in the USA