MILITARY | INDUSTRIAL | COMMERCIAL

Who We Are

CP Technologies

- CP Technologies designs, fabricates and integrates standard and customized high-performance computing platforms and LCD monitors for military, industry, and commercial applications.
- Using COTS components, CP Technologies 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 Technologies is an ITAR Registered and SBA-certified small business that has been operating in Southern California for over a decade.

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-S-901, in addition to FCC, UL, CE, and country specific agency requirements

Contact us today!
858.571.4330
combatproven.tech

YOUR CONFIGURATION. ONE PART NUMBER.

- It's our mission to make your life easier. Our Sales Engineers will help you select the right configuration for your project, making sure the details are analyzed and that the system meets your specifications.
- One part number means easier procurement and less paperwork for you.
- Dedicated Sales and Program Managers.
- Last time buy opportunities for end-of-life components.

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

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
- 2-year warranty on all integrated systems and LCD monitor products
- Assembled in the USA

Website: combatproven.tech

Product Page: https://combatproven.tech/rugged-servers/industrial/4u/

CP Technologies
10840 Thornmint Road · San Diego, CA 92127

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R4U26-1018

COTS Rugged Industrial Grade 4U Rackmount Computer System

MILITARY | INDUSTRIAL | COMMERCIAL

Models R4U2610, R4U2611

Assembled in the USA
ISO 9001:20015 Certified
ITAR Registered

Our R4U-26 can be used for many rugged, computationally-intense industrial applications. It has exceptional strength and durability and contains our proprietary SysCool® thermal management system. SysCool® extends the life of the computing system, reduces power consumption, and lowers overall system noise levels.

Specifications for our standard products can always be customized to fit your unique application requirements.

In-house Engineering Department

Rapid Prototyping

CPU & Memory Options

- Single or Dual Intel® Xeon® E5 Series
  - CPU options up to 2.1GHz, 8 Cores
  - Memory options up to 512GB

Drive Capacity

- 3(x) 5.25" Drive Bays

Applications

- Airborne Operations
- Land-based Operations
- Seaborne Operations
- Telemetry
- Diagnostics
- Simulation
- Communications
- Imaging
- Persistent Surveillance
- UAVs
- Automation
- Severe Environment Operations

Harsh Environments

Designed to meet or exceed the below environmental specifications.

ALTITUDE
12,000 ft Operational, 40,000 ft Storage

HIGH TEMPERATURE
60°C Operational, 70°C Storage

LOW TEMPERATURE
0°C Operational, -40°C Storage

HUMIDITY
5-95%, Non-condensing

VIBRATION
2G RMS 5-500Hz

BENCH HANDLING SHOCK DROP TEST
20G @ 11ms Duration

Contact us today!
858.571.4330
combatproven.tech

COTS Rugged Industrial Grade 4U Rackmount Computer System

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Chassis Specifications

DIMENSIONS

19" X 7" X 26.4" (482.6mm X 177.8mm X 670.6mm)

WEIGHT

46 pounds, weight varies by configuration

ENCLOSURE FEATURES

Construction

Front Panel: 0.250" milled 5052-H32 aircraft-grade aluminum
Enclosure Body: 0.062" 5052-H32 aircraft-grade aluminum
Rear Slot Panel: 16 gauge CRS, zinc plated with 10-32 grounding lug

Front Door

Aluminum, formed and welded, with three captive closure fasteners
Milled channel with environmental gasket
Built in, removable, washable air filter

Drive Capacity

3(x) 5.25" drive bays

Indicators

Power on, disk access, fan failure and over temperature indicators

Switches

Power and alarm reset switches behind front door

Powdercoating

Black per MIL-PRF-24712, Type IV, Class 3, Cardinal C214-BK110 polyester semi-gloss, fine texture

Plating

Chem-Film per MIL-C-5541F, Class 1A

FRONT USB PORTS

(2x) ports USB 2.0

SYSTEM COOLING

(3x) 120mm, 150 CFM, 200K hour MTBF cooling fans
Proprietary SysCool™ intelligent adaptive fan controller and temperature alarm circuit board

MOTHER BOARD CAPACITY

Designed for motherboards up to 15"x13"

POWER SUPPLY

Front mount single or redundant 800W 110/220 Volt AC
Other power options available

LCD Power Alternative

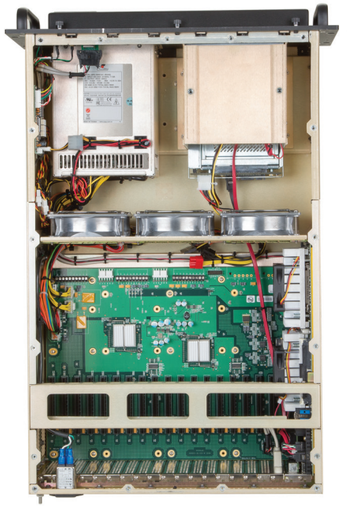
CP Technologies' 2U-5U rackmount computer systems are designed with a removable back plate that allows a 12V power cord to run from the computer's power supply to a display or keyboard video monitor. This optional feature, the Exterior Power Jack, is available for most CP Technologies' monitors.

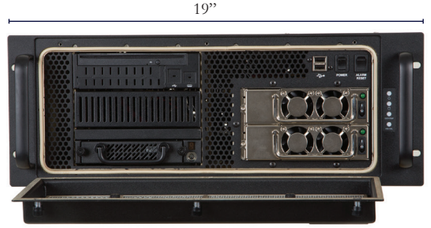
By running the display with the computer systems' power supply, this Exterior Power Jack option can provide many benefits:

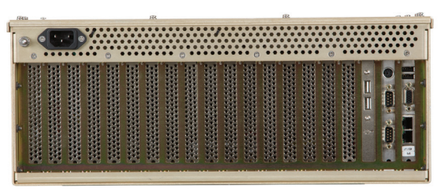
- Reduction in the number of required cables
- Elimination of additional equipment, i.e., a power brick
- Reduction in total system weight and cost

To enjoy these benefits, power up your new display with this CP Technologies' server.

R4U-26 Photos







I/O connectors are dependent upon the model and configuration selected. See specifications for details.

Computer Specifications

	R4U2610	R4U2611
CPU	Single or Dual Intel® Xeon® Processor E5-2658 (20M, 2.10 GHz, 8.0 GT/s Intel® QPI) OR Single or Dual Intel® Xeon® Processor E5-2428L (15M, 1.80 GHz, 7.2 GT/s Intel® QPI)	Single or Dual Intel® Xeon® Processor E5-2658 (20M, 2.10 GHz, 8.0 GT/s Intel® QPI) OR Single or Dual Intel® Xeon® Processor E5-2428L (15M, 1.80 GHz, 7.2 GT/s Intel® QPI)
CHIP SET	Intel® C600-A Platform Controller Hub (PCH), QPI up to 8.0 GT/s	Intel® C602 Platform Controller Hub (PCH), QPI up to 8.0 GT/s
MAX RAM	(16x) 240-pin DDR3, Max. 512GB DDR3 ECC Reg.	(16x) 240-pin DDR3, Max. 512GB DDR3 ECC Reg.
HARD DRIVES	Up to (3x) 3.5" SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations. Other rotating media and solid state storage sizes available	Up to (3x) 3.5" SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations. Other rotating media and solid state storage sizes available
RAID OPTION	JBOD, RAID 0, 1, 5	JBOD, RAID 0, 1, 5
OPTICAL DRIVE	Slim Slot-Fed 8x DVDRW	Slim Slot-Fed 8x DVDRW
EXPANSION SLOTS	(4x) PCIe x16 (Gen 3.0), (1x) PCIe x8 (Gen 3.0), (1x) PCIe x4 (Gen 2.0)	(10x) PCIe x8 (Gen 3.0), (1x) PCIe x4 (Gen 2.0)
REAR I/O	(1x) DB-9 RS232 serial port, (4x) RJ45 GbE LAN ports, (4x) USB 2.0 ports, (1x) DB-15 VGA port	(1x) DB-9 RS232 serial port, (2x) RJ45 GbE LAN ports, (4x) USB 2.0 ports, (1x) RJ45 dedicated IPMI, DB-15 VGA port, (1x) UID switch
ON BOARD GRAPHICS	Matrox G200	Matrox G200eW
AUDIO	NA	NA
LAN	(4x) Gigabit through Intel® i350-AM Quad 10/100/1000 integrated GbE MAC and PHY controller	Dual Intel® i350 Gigabit Ethernet ports & (1x) Realtek® RTL8201N PHY (dedicated IPMI)
O/S	Windows XP® Pro, Windows 7® Pro, 32 & 64-bit Other O/S Available	Windows XP® Pro, Windows 7® Pro, 32 & 64-bit Other O/S Available