



SA2U | RUGGED STORAGE ARRAY

RUGGED STORAGE

The SA2U features a 12 or 24 drive hardware RAID storage array housed in a 2 rack unit (2U) enclosure providing dual 3Gb SAS interfaces per controller to internal 2.5 inch or SSD drives. The SA2U adds support for the emerging 2.5 inch enterprise disk technology to deliver higher IOPS performance in a 2U rack size and shorter chassis depth of under 600mm including cable bends. In addition to the two host attach SAS connections, an internal SAS interface will support up to six additional drive enclosures with 3.5" SAS or SATA drives or three additional enclosures with 2.5" SAS or SATA drives. With support for a total of 96 attached drives managed by the RAID architecture, the SA2U is a low-cost hardware RAID storage solution quickly adding additional server storage. The SA2U uses revolutionary technology that instantly and simultaneously mirrors cache between RAID controllers, leading to significant performance improvements over traditional implementations. The use of RAID cache batteries has been completely eliminated with the introduction of super capacitors, providing infinite cache backup during a power loss while being environmentally friendly. The SA2U provides built-in volume snapshot capability allowing point-in-time copies that can be used to maximize business continuity. A full volume copy provides additional protection against disk failure and eliminates application I/O contention when accessing the same data blocks. The SA2U is easy to configure and manage with an improved intuitive Web Based Interface (WBI) which provides storage setup and monitoring without the need for host based software.



Who We Are

CP Technologies, a business unit of CP North America, 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 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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TECH SPECS

COMPUTER SPECIFICATIONS

CPU	Single or Dual Intel® Xeon® Processor
CHIPSET	Intel® Based Chipset
MEMORY CAPACITY	Varies with configuration
STORAGE	Up to 24 drives per chassis with up to 7 chassis (1 RAID and 6 JBOD) per system
RAID OPTION	JBOD, RAID 0, 1, 5, 6, 10, 50
SYSTEM COOLING	Proprietary SysCool™ intelligent adaptive fan controller and temperature alarm circuit board
HOST	Up to 8 direct connected hosts via FCP
POWER SUPPLY	500W 110/220 Volt AC Other power options available



TECH SPECS

CHASSIS SPECIFICATIONS

DIMENSIONS	17.6" X 3.5" X 20.43-23.7" (447mm X 88.9mm X 519-596mm)
WEIGHT	Varies with configuration
CONSTRUCTION	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
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

HARSH ENVIRONMENTS

Designed to meet or exceed MIL-STD-810G to the below specifications.

ALTITUDE	12,000 ft Operational, 40,000 ft Storage MIL-STD-810, Method 500.6
HIGH TEMPERATURE	60°C Operational, 70°C Storage MIL-STD-810, Method 501.6
LOW TEMPERATURE	-10°C Operational, -40°C Storage MIL-STD-810, Method 502.6
HUMIDITY	5-95%, Non-condensing MIL-STD-810, Method 507.6
BLOWING SAND AND DUST	MIL-STD-810, Method 510.6
TRANSPORT VIBRATION	MIL-STD-810, Method 514.7
BENCH HANDLING SHOCK	MIL-STD-810, Method 516.7 Procedure VI

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

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

FACILITY AND TEST

- All integration work is performed in a state-of-the-art, ESD-controlled facility
- Our facility has 50,000 sqft and has dedicated areas for manufacturing and 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
- 5-year warranty on all servers and 3-year warranty on LCD monitor products
- TAA compliant
- Built in the USA

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