

Dell PowerVault 220S and 221S SCSI Enclosures



The Dell™ PowerVault™ 220S and 221S SCSI Enclosures provide affordable expandability for your Dell PowerEdge™ servers and PowerVault Network Attached Storage (NAS) servers.

SCSI Simplicity

When your server reaches the limits of its internal storage capacity, the Dell PowerVault rack-optimized 220S and PowerVault 221S tower SCSI enclosures offer cost-efficient external storage expansion for Dell PowerEdge servers and PowerVault storage servers. Supporting popular industry standards such as Ultra320 (U320) SCSI, SES and SAF-TE specifications, these enclosures are designed for easy installation and configuration. And when it comes to upgrades or servicing, the chassis design helps make maintenance a snap.

Remote administration is performed through Dell OpenManage™ Array Manager, which provides a management interface that was developed for all Dell storage arrays. All with the benefit of Dell Premier Enterprise Service and Support.

Powerful Storage, Low Cost

Offering high capacity and high speed, the PowerVault 220S and 221S SCSI enclosures are an outstanding value. With up to 4.2TB maximum storage capacity with burst data transfer rates of up to 320MB per second, your storage-hungry business applications will love these SCSI enclosures.

Because of the modular design, the PowerVault 220S and 221S SCSI enclosures can be configured to your specifications. With a wide range of options providing various levels of redundancy, availability and performance, you only pay for what you need. You can design a system with your choice of hard disk drive capacities and speeds, such as 36GB, 73GB, 146GB or 300GB at 10,000rpm or 36GB, 73GB or 146GB at 15,000 rpm. Additionally, the PowerVault 220S and 221S SCSI enclosures give you the flexibility to attach to one server or two independent or clustered servers. This gives you the freedom to consolidate for disk utilization and high availability for your business-critical applications.

High Availability and Reliability

Designed with reliability in mind, the PowerVault 220S and 221S SCSI enclosures offer high availability and reliability features through hot-pluggable and redundant components. The hard disk drives, cooling units and power supplies are all hot-pluggable and redundant. For increased protection or performance, PowerEdge RAID controllers can be used to set RAID levels 0, 1, 5, 10 and 50 and expand storage to multiple terabytes in a variety of computing environments. The PowerVault 220S and 221S offer storage you can trust for your vital information simply, cost-effectively, powerfully.



GET MORE PERFORMANCE AND VALUE. GET MORE OUT OF NOW.





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DELL ENTERPRISE SERVICES

Dell Services can deliver the services you need to realize the full value of your IT investment. Complementing our award-winning products, these IT infrastructure services incorporate operational excellence, accountability and value.

By utilizing our best practices, proven processes and expertise in implementing standards-based technologies, we can help strengthen your IT infrastructure and enable you to adopt evolving technologies. Whether you need support, deployment, asset management, training, certification, planning or professional services – individually or bundled as a total solution – you can count on Dell.

Strengthening Your IT Infrastructure

Our planning services help integrate your new enterprise hardware into your existing or evolving IT infrastructure. We can provide guidance whether you're adding a single or multiple servers, storage area network or high-performance computing cluster.

We can also help you enhance the overall performance of your IT infrastructure and data center by consolidating software and hardware, developing a business continuity plan and migrating to standards-based technologies.

Simplifying Deployment

Dell simplifies implementation with comprehensive services that accelerate deployment of new hardware and IT solutions. During the initial system-build of your server, we can customize software and hardware to match your specific requirements. By helping you rapidly deploy new capabilities while minimizing disruptions, we can contribute to improved efficiencies and lower costs.

Our training services provide education and certification courses to help you better manage and use your new hardware so you can reap the full benefits of standards-based technologies.

Providing Award-Winning Service & Support

Your server and storage infrastructure is central to your business, which is why you need a partner who can help minimize downtime and keep your business-critical systems running efficiently. Our enterprise support services are designed to protect your entire enterprise or to focus on specific systems. These customizable services include hardware and software support with varied response levels, account management and remote resolution.

We can also help you enhance the performance of your data center and provide managed IT solutions and asset management services for your enterprise, desktop and notebook environments.

The Dell Enterprise Command Centers (ECC) – which utilize industry-leading technologies and tools that speed up problem resolution – efficiently route spare parts and direct expert technicians to your site.

Services vary by region. For more information, please visit www.dell.com.

FEATURES DESCRIPTION

Disk drives	Up to 14 320MB/s Ultra320 (U320) LVD SCSI 1" x 3.5" drives Hot-plug hard drives, 36GB, 73GB, 146GB or 300GB at 10,000rpm or 36GB, 73GB or 146GB at 15,000 rpm SCSI buses can be configured for a single 14-device SCSI bus, a single clustered 13-device SCSI bus, or two independent 7-device SCSI buses
Back-panel connectors	SCSI connectors: 68-pin shielded P-type SCSI for connection to host
Backplane board connectors	Hard drives: fourteen 80-pin SCA-2 connectors Power supply and cooling module: two high-current connectors Enclosure management module (EMM): 210-pin connector Split-bus module: 180-pin connector
Enclosure modules	Enclosure management module: two warm-swappable modules to help monitor and report component status Split-bus module: one warm-swappable module with an external slide switch to change between split, joined and cluster modes Terminator card: one warm-swappable module to terminate SCSI bus if only one EMM is configured
LED indicators	Front panel: five status LED indicators for power, fault, split-bus, cluster mode, and temperature Hard-drive carrier: one single-color activity LED and one two-color status LED indicator per drive Enclosure management module: three status LED indicators for power, fault, and primary or secondary functionality Split-bus module: one LED indicator for power
Power supply and cooling module	Three status LED indicators for power supply status, power supply fault, and AC status and two for cooling module fault
Wattage	600 watts
Heat dissipation	200 watts
Voltage	100 – 240 volts rated (actual 85–264)
Frequency	50 – 60Hz
Amperage	9.4A at 100 volts, 4.6A at 200 volts
Dimensions (H x W x D)	5.22" x 17.55" x 20" (13.2 cm x 44.5 cm x 50.8 cm)
Weight	PowerVault 220S 71.5 lbs. (32.4 kg) maximum redundant configuration with all hard drives installed PowerVault 221S 93.0 lbs. (42.2 kg) maximum redundant configuration with all hard drives installed
Temperature	Operating 50°F to 95°F (10°C to 35°C) Storage -40°F to 149°F (-40°C to 65°C)
Relative humidity	Operating 8% to 80% (noncondensing) Storage 8% to 95% (noncondensing)
Altitude	Operating -50 ft. to 10,000 ft. (-16 m to 3048 m)
British thermal unit	2750/hour

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