

DELL POWEREDGE 4820 RACK ENCLOSURE



Offering even more internal density and all of the design features customers expect, the Dell™ PowerEdge™ 4820 rack enclosure has an expanded 48U height and provides solutions for critical power, cooling, and cabling concerns.

THE CHOICES YOU WANT IN THE RACKS YOU TRUST

The Dell 4820 rack enclosure is designed to hold and protect vital server, network, and data storage equipment. This new rack has the practical design that enterprise customers expect from Dell; it is solidly built and delivered with Dell's legendary service, support, and reliability. The Dell 4820 rack features enhancements over traditional cabinets that address critical issues such as power, cooling, and cabling. Dell racks are designed to be used in any environment including data centers, remote offices, wiring closets, or even factory floors. The 4820 rack is a new addition to the Dell line which now offers three sizes: 48U spaces (4820), 42U spaces (4220), and 24U spaces (2420).

Because all Dell racks adhere to the EIA/ECA-310-E standards of 19" (482.6 mm) for rack mounting of electronics, they accommodate a wide array of components:

- Dell PowerEdge servers
- Dell PowerVault™, Dell EqualLogic™, and Dell/EMC storage
- PowerConnect™ switches
- Other networking equipment such as routers, switches, and hubs
- Telephony equipment

Built with adjustable vertical mounting rails within the rack, the Dell 4820 rack is more universal than traditional racks in accommodating multiple types of IT equipment while still managing airflow effectively.

MORE POWER FLEXIBILITY

The Dell 4820 rack provides choices in the types and form factors of power distribution units (PDUs) that can be mounted. In addition to U-space PDU mounting, the Dell 4820 rack offers toolless PDU mounting at the rear of the rack along the doors. This range of options means the Dell 4820 rack stands out against competitors with a wide choice of PDU mounting locations. And if there is a need to mount full-length PDUs (89.5" or 1.7m in height) alongside the rear door without cables impeding airflow, the Dell 4820 rack provides maximum distance between the back panels of the server and the PDU outlets. The quantity and spacing of the mounting points and cable access cut-outs have increased from previous Dell racks, and the square holes in the rear frame posts are accessible. The enhanced options for PDU mounting give you more options and control.

BETTER OPTIONS FOR COOLING

Dell rack doors are designed for better airflow with 80% perforated door surface area, the highest perforation rating among the leading data center racks sold worldwide. The Dell 4820 rack is built with a depth of 42.15" (1070mm), which allows more space for hot air to exit the rack compared to racks with depths of 39.37" (1000mm). At the front of the rack frame, air dams block hot air from traveling from the back of the server to the front of the server, a thermal issue common among traditional racks. For hot-aisle/cold-aisle thermally efficient data center topologies, the footprint of the rack corresponds to standard 2' (609.6mm) floor tile placement, optimizing sub-floor cable and cold-air access without conflict.



SIMPLER CABLE MANAGEMENT

The Dell 4820 rack depth provides additional space for cable management. The 48U rack height allows additional equipment density, and dual side panels make it easier to access cables by removing the top or bottom section. In addition, the back frame of the rack features removable tail bars at the top and bottom to solve a common obstacle in routing power and communication cables. The tail bars can be securely reattached after the IT equipment cabling is complete. This simplifies the task of incorporating new cables to existing bundles.

STRENGTH AND SECURITY

The Dell 4820 rack has a static load rating of 2,500 lbs (1.13 metric tons). No special infrastructure is required for many installations. The racks can ship with side stabilizer bars to secure the rack to the floor or ganging kits to bolt adjacent racks to each other (both accessories are sold separately). With lockable doors at the front and rear of the rack, Dell 4820 racks are designed to be used in any environment.

Features	
Increased rack density	Rack-top cable exits with adjustable, sliding door
Adjustable vertical mounting rails slide forward or backward within the rack	Front and rear doors are removable
Rotating rear casters to easily position rack	Dual rear doors, with lock
Static load rating of 2,500 lbs. (1.13 metric tons)	Split side panels, with locks
Reinforced frame for stability	Reversible front door opens from left or right, with lock
Ideal base dimensions for 2-tile placement in data center	Front and rear doors have an 80% open perforation pattern to aid in the thermal management of ultra-dense environments
Easily accessible leveling feet	Unique side-rack PDU options for Dell PDUs
Large open base for cable entry and exit	U-space numerical markings on both front and rear server mounting posts
Rack Accessories	
Dell Blanking panels (available in 1U, 2U, 3U, and 6U sizes)	Dell 4820 Side panel kit
Dell Fixed Equipment Rack shelf	Dell 4820/4220 Ganging kits
Dell Fan tray (120V, 208V, 230V)	Dell 4820/4220 Stabilizer kit
Other Accessories	
Dell Power Distribution Units (PDUs)	Dell 1U KMM (keyboard, monitor, mouse) Console
Dell Rackmount UPS (uninterrupted power supplies)	Dell KVM (keyboard, video, mouse) console switches
Dimensions	
Height	89.5" (2273mm)
Width	23.82" (605mm)
Depth	42.15" (1070mm)
Availability	
48U frame with front and rear doors	48U frame with front and rear doors and side panels

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