



Rack Mounting and the HP Workstation

Introduction

Whether it is an IT technician servicing a single rack, or a team of professionals managing multiple data centers—with HP Rack Mounting Solutions, everyday tasks are made easy. HP's rack mounting kits are engineered with the same customer-centric design philosophies that have made the Workstation product line a continuing success.

In order to maximize rack density, HP engineers have designed a low-profile fixed-rail solution that can be customized on-the-spot to fit any of the HP Z2 or Z4 series of CMT Workstations. The system-tray features captive fasteners, allowing for quick and easy tool-free access to the Workstation. With integrated latches, the tray remains secured to the shelf until it is safe and ready to remove.

For the HP Z6/Z8 series of Workstations, HP has designed an enterprise-class rail solution that fully extends—allowing for in-rack configuration of the Workstation. Gaining access to the interior components of a rack mounted Z6/Z8 Workstation is a tool-free operation.



Rack Mounting for the HP Z2/Z4 Series Workstations

The HP xw4/Z2/Z4 Rack Mount kit (**WH340AA**) includes a set of fixed-rail support brackets that attach directly to the rack and provide a secure mounting platform for the system-tray and workstation. The fixed-rails are adjustable and can accommodate racks that are 24 – 30 inches deep.

The locking system-tray is engineered to provide tool-free access to the workstation. The tray includes release latches to ensure safe removal of the workstation from the server rack and a system ID label for easy identification.



Fig 1 - The HP xw4/Z2/Z4 Rack Mount kit (WH340AA) assembled



Fig 2 - The HP Z420 installed in a xw4/Z2/Z4 Rack Mount kit (WH340AA)

HP recommends Windows.

Rack Mounting for the HP Z6/Z8 Series Workstations

HP's Z6/Z8 Rack Mount kit (**B8S55AA**) features enterprise-class, three-section ball-bearing extension rails. These rails are fully extendable, allowing the unit to slide completely out of the rack for servicing. Whether it is adding memory, swapping hard disk drives, or installing an option card – upgrading a rack mounted Workstation is a snap.

The HP Z6/Z8 Rack Mount kit rails installs into HP racks without using tools, making setup convenient and efficient. The inner slide and mounting flanges attach to the computer chassis using a set of screws for added strength and stability. The top mounting holes are concealed underneath the top plastic trim, which must be removed along with the rear handle to attach the inner slide and mounting flanges.



Fig 3 – A Rack-Mounted HP Z820 installed with a HP Z6/Z8 Rack Mount kit (B8S55AA) showing access to interior Workstation components

Some of our customers need to mount their workstations into racks that are only 24 inches deep (such as those commonly used in the Broadcast industry), instead of the 29-30 inch deep racks that are commonly used in the industry (including HP racks), so adjustability was an important objective. The HP Z6/Z8 Rack Mount Solution is adjustable to accommodate racks 24 – 30 inches deep. For convenience, the adjustable rails are shipped configured to fit standard HP racks.



Fig 4 – The HP Z6/Z8 Rack Mount kit (B8S55AA) components

HP recommends Windows.

How HP Rack Kits fit “U”

Broadcast and IT racks are typically measured in units of “U” —where each “U” is equal to 1.75” (44.5 mm). HP rack kits are designed to optimize the distribution of Workstations in a server rack—providing each unit with sufficient airflow to maintain ideal operating temperatures and adequate clearances to gain access to the Workstation. Refer to the table below to determine which rack kit is compatible with your Workstation, and how much space is required.

HP Product Number	Description	Rack Type Supported ^{1,2}	HP Z2 Series	HP Z400	HP Z420	HP Z6 Series	HP Z8 Series
WH340AA	HP xw4/Z2/Z4 Depth Adj. Fixed Rail Rack Kit	IT Rack, Broadcast Rack	4½U	4U	4½U		
B8S55AA	HP Z6/Z8 Depth Adj. Sliding Rail Rack Kit	IT Rack, Broadcast Rack ³				4U	5U

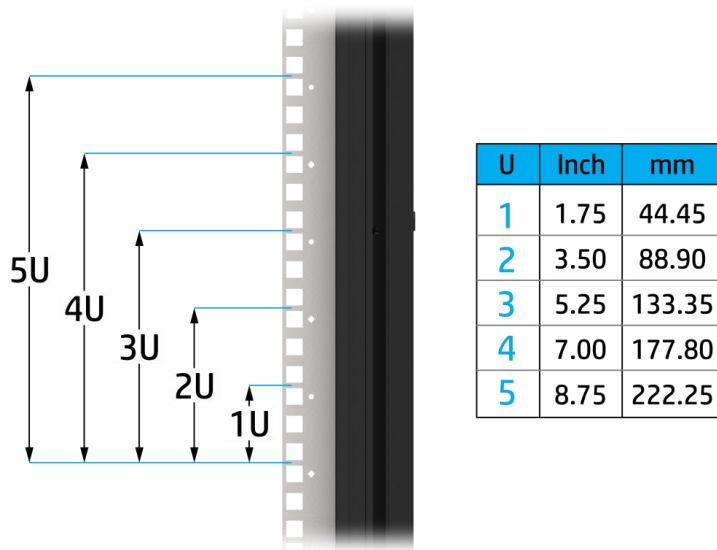


Fig 5 – Layout and dimensions of a 5U rack space

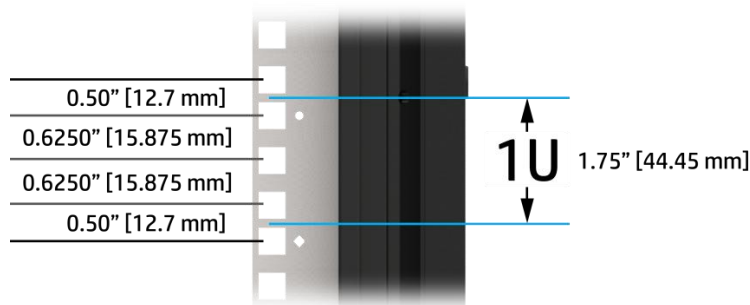


Fig 6 – Rack mounting hole positioning in 1U rack space

HP recommends Windows.

Environmentally friendly

HP is committed to environmental sustainability. The HP Workstation design team has taken a proactive approach (beyond just industry regulations) to recyclability and selecting materials that reduce the risk to the environment and health.

Conclusion

As a technology leader, HP continues to lead the way in innovative design solutions for rack mounting. HP rack mounting kits are engineered to improve the end user experience. HP is using its extensive experience in customer-centric designs to develop environmentally friendly, highly accessible, rack mounting solutions for today, and new innovations for tomorrow's more powerful systems.

Notes

1. IT Racks typically have 30" depth between the front and rear rails, and either round or square untapped holes with clip-on nuts.
2. Broadcast racks have a depth of 24" between the rails and the mounting holes are typically tapped for #10-32 threads.
3. Parts for installing the sliding rack mount kit in HP legacy racks are sold separately in adapter kit part number WD587AA and are compatible with the following rack models: E3660B, E3661B, E3662B, E7590A, J1450B or J1487A/B.

For more information

hp.com/go/whitepapers

Whitepapers with more depth on the capabilities and benefits of HP Z Workstations

hp.com/go/workstations

Information about HP Workstations

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