

HP recommends Windows® 7.



HP Z820 Workstation

Product Design Highlights

Introduction

Better does not have to mean bigger. HP is proud to introduce the ultimate in high performance computing—the HP Z820 Workstation. Building on the award-winning design of its predecessor, the HP Z820 delivers more power and an enhanced feature set—without an increase in size.

Mobility and flexibility

With integrated front and rear full-grip carrying handles and slick foot pads, the HP Z820 can be easily moved to a new location or to gain better access. The flexible HP Z820 design can be used in desk-side installations, or rack-mounted using HP's enterprise-class, fully extendable rails. And now, with USB 3.0 featured on the front and rear of the workstation, the HP Z820 offers the ability to customize access to high-speed external devices. HP also offers a rich portfolio of external bay adapter options including optical drives, media card readers, and internally and externally accessible HDD carriers—the possibilities to customize are endless.

On the inside

With the new HP Z820, HP has taken a fresh look at the design of the interior of the workstation. Many of the system cables have been carefully routed and remain hidden from view, streamlining system upgrades, and improving airflow management.

Finding internal components and connections has never been easier. All of our user-serviceable components are identified with consistent green touch points, and the removable service panel has been laser-etched to provide users with a clear layout of the HP Z820 system board and concise configuration information. Whether it is adding a third graphics card, or upgrading to the new Liquid Cooled heat sinks—the HP Z820 continues to offer an unmatched ease of expandability.

Designing the experience

HP Workstations have always been an industry leader in designing for the customer experience. With groundbreaking innovations in tool-free design, servicing the HP Z820 is as easy as ever. Whether it is adding hard drives, expanding memory, or upgrading graphics capabilities—the HP Z820 provides tool-free access to most internal components. Due to the tool-free ease of use, HP understands system and component security may be a concern, therefore several security features have been incorporated. The side access panel key lock and a Kensington security slot are included standard, and a system intrusion switch is available as an optional accessory.

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Quiet and reliable

Acoustic performance is essential to HP and our customers because a noisy environment increases user fatigue and reduces productivity. HP has extended its leadership in this area with the design of HP Z820. With all its additional expandability, one might expect the HP Z820 to be louder than the already quiet HP Z800. However, through innovations in engineering, strategically placed fans, and active fan control, the HP Z820 is even quieter. As with all our workstations, the HP Z820 hard drives are mechanically isolated to reduce vibration and noise—improving the customer experience.

In order to address the ever-increasing demand for power, the HP Z820 has taken a comprehensive approach to maintaining thermal performance. With internal fans distributed throughout the system, airflow is targeted at the high power-density components. HP's advanced algorithms control fan speeds instantaneously based on system configuration and workload, providing users with industry-leading acoustics and uncompromising reliability and performance.

While acoustic and thermal performance is paramount, it is also important that the HP Z820 operates dependably under extreme workloads and in harsh environments. Rigorous climatic and dynamic testing helps to ensure that HP workstations are highly reliable in a wide variety of demanding conditions, while delivering uncompromising performance. The HP Z820 is designed to withstand severe shock events and high vibration environments.

Environmentally friendly

HP is committed to environmental sustainability and energy efficiency. To reduce energy consumption, HP workstations offer ENERGY STAR® qualified configurations and the HP Z820 features a 90 percent efficient power supply. 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. The HP Z820 configurations are available with non-halogenated flame retardant (BFR/PVC-free) materials.¹

Additional resources

hp.com/go/whitepapers

hp.com/support/Z820_manuals

Screen images courtesy of Cannon Design.

¹ Meeting the industry definition of 'BFR/PVC-free' per the iNEMI Position Statement on "Low Halogen" Electronics. Plastic parts incorporated into the chassis generally contain < 1000 ppm (0.1%) of bromine or chlorine. Printed circuit board and substrate laminates generally contain < 1500 ppm (0.15%) of total bromine and chlorine. Service parts after purchase may not be BFR/PVC-free. External accessories, including power supplies, power cords, and peripherals as well as the following customer-configurable internal components: SAS 3 ½" HDD, SAS ROM Upgrade (Patsburg), SAS RAID Card, Creative Audio Card, and Broadcom NIC are not BFR/PVC-free.

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