HP Z420 Workstation

Product Design Highlights



Introduction

HP Z420 Workstation is a single processor system which delivers outstanding value and performance in a new expandable and quiet convertible mini-tower. The expandable design; supports the latest professional graphics and single socket processor multi-core technology. Also, with a standard 600W, 90 percent efficient power supply, the HP Z420 supports more high-end hardware configurations.

Tool-free design

The HP Z420 Workstation features a smart chassis design that offers tool-free access to the inside, easy configurability, and an optional top optical top optical bay handle for seamless deployment. Cabling is efficiently routed to provide a well-organized interior for improved access and airflow management. Upgrading components is intuitive and easy with clearly marked green touch points and tool-free access to the following components: side access panel, front bezel, hard drives, optical devices, expansion cards, system fans, and memory ducts.

Security

Due to the tool-free ease of use, HP understands system and component security may be a concern. As a result security features have been incorporated into the HP Z420. The side access panel padlock and a Kensington security slot features are included standard. In addition, a system intrusion switch and a remote/centrally controlled solenoid lock are optional accessories.

Expandability and performance

The HP Z420 delivers enhanced expandability and I/O performance where it matters. Expandability is improved over previous generation products with the addition of a 3rd internal 3.5" drive bay and two more memory slots (8 DIMM slots total). The new architecture provides faster memory and three high-performance 3rd-generation, PCI Express expansion slots (two x16, one x8). To help eliminate bottlenecks with external devices, HP Z420 also provides four easily accessible SuperSpeed USB 3.0 ports, two on the front and two on the rear of the system. The HP Z420 has the power and features needed to quickly get the job done.





Quiet and reliable

HP continues to lead and provide the quietest line of workstations, and the HP Z420 is no exception. Fans are strategically placed in the chassis to provide optimum system cooling and uncompromised reliability by using advanced algorithms to control fan speeds based on system configuration and key component temperatures. In addition, HP engineered an advanced liquid cooling solution to keep the HP Z420 running cool and quiet even under the heaviest processing workloads. HP also demonstrates innovation by providing new tool-free hard drive rails with improved mechanical isolation to reduce chassis vibration and noise.

While low acoustics, thermal management, expandability, and performance are priorities, it is essential that the system reliably withstand difficult physical conditions. The HP Z420 is built to withstand high shock and vibration 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.

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 Z420 features a 90 percent efficient power supply standard. In addition, the HP Workstation design team takes a proactive approach (beyond industry regulations) to recyclability and selecting materials that reduce the risk to the environment and health. As a result, the HP Z420 offers configurations with non-halogenated flame retardant (BFR/PVC-free) materials.¹

Additional resources

hp.com/go/whitepapers

hp.com/support/Z420_manuals

- 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 3½" HDD, SAS ROM Upgrade (Patsburg), SAS RAID Card, Creative Audio Card, and Broadcom NIC are not BFR/PVC-free.</p>
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