

HP Z230 Workstation Chassis Benefits



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Introduction

HP Z230
Small Form Factor



The HP Z230, HP's most affordable, no-compromise workstation, offers industry-leading performance, acoustics and expandability in a choice of two all-new chassis -- a Tower or a Small Form Factor. This technical whitepaper compares the features and benefits of the two types of HP Z230 Workstation chassis. As follow-ons to the HP Z220 Workstations, the HP Z230 Tower and SFF Workstations introduce new functionalities and technologies to the entry workstation class. Both the Tower and SFF versions of the HP Z230 Workstation deliver outstanding value and performance with impressive expandability, serviceability and flexibility.

Expandability

The HP Z230 delivers unparalleled expandability in the entry workstation class, with four drive bays in the SFF and six drive bays in the Tower. These bays can support a variety of devices, including Hard Drives, Solid State Drives, DVD/Blu-ray readers and writers, and HP 14-in-1 Media Card Reader Kit. As for accessories, the HP Z230 Workstation supports externally-accessible HDDs, a variety of Solid State HDDs, and additionally, the Tower can support the HP 4-in-1 SFF HDD Carrier.

Table 1. HP Z230 Expandability

	HP Z230 SFF	HP Z230 Tower
External bays	1 5.25" half-height	2 5.25" half-height 1 12.7mm Slim Optical Drive
Internal/External bays	1 3.5" bay	
Internal bays	1 3.5" tool-free bay 1 2.5" bay	2 3.5" tool-free HDD bays 1 2.5" tool-free bay
Expansion Slots	1 PCIe-x16 Gen3, low profile 1 PCIe-x4 Gen2, low profile 2 PCIe-x1 Gen2, low profile	1 PCIe-x16 Gen3, full height, full length 1 PCIe-x4 Gen2, full height, full length 1 PCIe-x1 Gen2, full height, full length 1 PCIe-x1 Gen2, full height, half length 1 PCI 32/33
Power Supply	240W, 92% EFF	400W, 92% EFF

HP Z230 Tower



The HP Z230 SFF chassis has four expansion slots and the Tower has five expansion slots. The variety of expansion slots allows users to configure up to six monitors and two entry 3D cards (on the Tower). Additionally, the Tower supports a single high-end 3D graphics card up to 150 Watts with its PCI Express Auxiliary Power Connector and has a front USB charging port that charges high-power mobile devices such as tablets even when the HP Z230 is in sleep mode. Finally, both HP Z230 chassis have an assortment of built-in external I/O ports, including SuperSpeed USB 3.0 on both the front and rear panels.

Serviceability

Both the HP Z230 SFF and Tower Workstations feature a chassis design that provides tool-less access to the inside for easy serviceability and upgrades. Internal components including the hard drives, expansion cards, and memory are also tool-free. Intuitive, clearly marked green touch points simplify servicing and upgrading components. In addition, cabling is efficiently routed to build a well-organized interior for access.



HP Z230 Tower



HP Z230 SFF

Flexibility

HP has designed the chassis of the Z230 Tower for easy, seamless deployment with the optional front bay handle plus a rear handle ledge created by the recessed power supply. The HP Z230 Tower features a smaller chassis design which is 17% smaller than last generation's HP Z220 CMT and has the flexibility to be 4U-rackable.

Security

HP understands system and component security may be a concern due to the tool-free access and therefore has incorporated several security features. The side access panel padlock loop and a HP Keyed Lock slot are included standard. A system intrusion sensor and a remote/centrally controlled solenoid lock are optional accessories.

Quiet and reliable

HP had paid special attention to customers' needs for a quiet system and the HP Z230 delivers quiet acoustics despite its exceptional performance and expandability. The 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. As with all HP workstations, the hard drives are mechanically isolated to reduce vibration and noise.

While low acoustics, thermal reliability, expandability and performance are priorities, it is also essential that the system withstand difficult physical conditions. The HP Z230 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.



Low halogen

Designed with the environment in kind

HP is committed to environmental sustainability and energy efficiency. To reduce energy consumption, HP Workstations offer ENERGY STAR® qualified configurations and the HP Z230 features a 92% efficient power supply that is even higher efficiency than the HP Z220. The HP Workstation design team has taken a proactive approach (beyond industry regulations) to recyclability and selecting materials that reduce the risk to the environment. As a result, Low Halogen configurations are offered on the HP Z230 Workstation.

Notes

1. External power supplies, power cords, cables and peripherals, are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

For more information

hp.com/go/whitepapers

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

hp.com/zworkstations

Information about HP Workstations

