HP Mini–White Paper

HP Z800 Workstation Product Design Highlights

After an extensive new design program, HP is excited to introduce the new high performance HP Z800 Workstation. This compelling workstation was designed from the ground up, inside and out, with direct customer input. Besides the new holistic design language, the HP Z800 exudes quality with innovations in tool-free design, amazingly quiet acoustics, and even more expandability in a chassis smaller than last generation.

Mobility & Flexibility

One of the new user-centric features is the integration of carrying handles. The ergonomic handles are inset so not to increase the product size! And with slick foot pads, one can easily slide the system around to gain better access. The flexible HP Z800 design allows for the system to be used in the personal deskside tower orientation or rack-mounted.

Interior Design & Smart Cabling

Attention to detail is obvious when opening up the HP Z800. The streamlined interior is very organized with a consistent user access strategy. Every touchpoint is identified by a small green label and a consistent "handle" motif. And user access is a lot easier when there is not a profusion of cables in the way. Most of the cables are hidden, which provides better access and airflow management.

User-centric Tool-free Design

HP has always been a leader in tool-free product design and with the HP Z800, the serviceability is even easier! In addition to the components that were tool-free on previous HP workstations (access panel, hard drives, optical drives, memory, and expansion cards), the power supply and system board can now be serviced without tools. Another new feature is that the power supply, hard drives and memory fans plug directly into the system, so no manual cable connections are required for these components. The power supply has a convenient carrying handle that is also used to extract and insert the power supply. Users will find the translucent (see-thru) hard drive carriers very helpful when determining which bays are populated with a drive.

Quiet & Reliable

Acoustic noise is very important to HP and our customers because a noisy environment increases user fatigue and reduces productivity. HP extends its leadership in this area with the HP Z800, which was designed from the start for thermal and acoustic efficiency. As with all our workstations, the hard drives are mechanically isolated to reduce vibration and noise. The system is arranged so that sensitive components receive fresh cool air. The innovative power supply has its own fans and extends from the front of the system to the rear, ensuring that no pre-heated air is circulated through. With internal fans distributed throughout the system, airflow is targeted at the highest-power components. HP's advanced algorithms control fan speeds instantaneously based on system configuration and workload, so that the user gets the best of both worlds: industry-leading acoustics and uncompromising reliability. While low acoustics and thermal reliability are priorities, it is also important that the system can withstand difficult physical conditions. The HP Z800 is built to handle high shock and vibration environments with ease. Rigorous climatic and dynamic testing helps to ensure that HP Workstations are highly reliable in demanding conditions.