HP Z Workstations and SOLIDWORKS

Accelerate SOLIDWORKS workflows with certified HP Z Workstations that help you deliver your 3D CAD projects in less time

HP helps you stay ahead of the curve with professional desktop, virtual, and mobile workstations designed for large and complex datasets, dispersed teams, and tight deadlines.

HP recommends Windows.

“Because of our strong relationship with HP, our customers will be well served by selecting HP as their professional computing platform. HP Workstations are thoroughly tested and SOLIDWORKS-certified to provide the utmost in performance and reliability for SOLIDWORKS 3D CAD software.”

— Nick Iwaskow, Senior Alliances & Partnership Manager, SOLIDWORKS

Accelerate SOLIDWORKS workflows with HP Z Workstations

HP helps you stay ahead of the curve with professional desktop, virtual, and mobile workstations designed for large and complex datasets, dispersed teams, and tight deadlines. HP Z Workstations deliver the innovation, high performance, expandability, and extreme reliability you need to deliver your SOLIDWORKS 3D CAD projects in less time—from part and assembly modeling, to simulation and analysis, to photorealistic renderings and animations.

HP Z Workstations are certified for SOLIDWORKS, are designed for tool-free easy maintenance and upgrades, and include HP Performance Advisor software for system optimization and HP Remote Graphics Software for remotely accessing and sharing your HP Z Workstation.

HP also brings you high-resolution displays to see your work in vivid detail, HP Designjet ePrinters for fast and high quality technical drawings, the HP Z1 all-in-one Workstation with Touch, and the HP DL380z Virtual Workstation.

HP and SOLIDWORKS

SOLIDWORKS 3D CAD software delivers powerful product development design functionality with the intuitive SOLIDWORKS user interface to speed your design process and make you instantly productive. HP and SOLIDWORKS work closely together with partners Microsoft®, Intel®, AMD, and NVIDIA® to deliver a complete technology solution to SOLIDWORKS customers. As a result, HP Z Workstations deliver an enhanced experience with SOLIDWORKS software, and help you take SOLIDWORKS performance and productivity further. SOLIDWORKS uses HP Z Workstations to develop, test, and demonstrate SOLIDWORKS software.

When only the best will do

HP Z Workstations are built for the unyielding demands of today’s professional and technical workplaces. They are engineered to help your team work faster, work smarter, and gain a competitive edge. With bold designs, world-class engineering, robust management tools, and leading-edge visual collaboration solutions, HP Z Workstations take innovation, performance, and reliability to a new level.
HP Z Workstation innovation highlights

HP award-winning Z Workstations are rich with customer-driven innovations. Servicing is easy with a tool-less access chassis and modular, direct-connect drives and power supplies on select models.

HP Performance Advisor: the built-in workstation guru >>
HP Performance Advisor delivers a simple, effective way to keep your HP Z Workstation operating at its peak potential. Like having an IT pro always on hand, this useful software can help you optimize SOLIDWORKS software performance, monitor resource usage, and properly configure your technology ecosystem.

Remote Graphics Software: remote access with a “just like local” feel >>
HP Remote Graphics Software gives you high-performance remote desktop access to your SOLIDWORKS software—when and where you need it, on-site or from a remote location, through a standard internet connection. This HP innovation allows you to collaborate with colleagues across geographies, in real-time, using SOLIDWORKS software.

HP Z Displays: stunning at every angle >>
HP Z Displays are engineered to outperform, so you can create with striking visual results. With stunning IPS panels, 178-degree viewing and up to 10x the contrast ratio of mainstream Twisted Nematic displays, HP Z Displays are designed to deliver outstanding image performance and accuracy. Realize the advantages of ultra-fast response times and smooth color transitions—so the work you see can be as great as the work you do.

HP Designjet ePrinters: the power in your hands >>
HP Designjet ePrinters help streamline individual or multi-user SOLIDWORKS software workflows by delivering high-quality applications quickly and reliably. Plus, mobile connectivity capabilities and innovative usability features enable SOLIDWORKS users to accelerate collaboration as they take advantage of a new, easy-to-use printing experience.

HP Z Workstation certification for SOLIDWORKS software

Every year, HP provides new Z Workstation models, in dozens of configurations, to SOLIDWORKS QA teams for testing and official SOLIDWORKS certification. HP, SOLIDWORKS, Intel®, NVIDIA®, AMD, and Microsoft® collaborate to identify, escalate, and resolve any hardware-related issues. When SOLIDWORKS certifies HP Z Workstation configurations, you have confidence that it has been rigorously tested, and that it is officially SOLIDWORKS-approved. Certified HP Z Workstation configurations are listed on hp.com/go/cadcertification.
Meet the HP Z Workstation Family for SOLIDWORKS

HP offers a complete range of desktop, virtual, and mobile workstations built for the challenges of product development—from part and assembly modeling, to simulation and analysis, to photorealistic renderings and animations. HP ZBook Mobile Workstations are perfect for the shop floor and for travel, offering high performance with exceptional battery life, extreme durability and aerospace-inspired design. HP Z desktop Workstations include high performance options, solutions for space-constrained environments, and the industry’s first all-in-one professional workstation.

**HP Z230 SFF**
for 2D drafting and 3D modeling

**HP Z440**
for large and complex datasets

**HP Z840**
for simulation and PhotoView 360

### Operating system
- Windows 7 Professional 64-bit (available through downgrade rights from Windows 8.1 Pro 64-bit)*
- Windows 7 Professional 64-bit (available through downgrade rights from Windows 8.1 Pro 64-bit)*
- Windows 7 Professional 64-bit (available through downgrade rights from Windows 8.1 Pro 64-bit)*

### Processor
- Intel® Xeon® E3-1241v3 (3.5 GHz, 3.9T, quad-core)
- Intel® Xeon® E5-1630v3 (3.7 GHz, 3.8T, quad-core)
- 2x Intel® Xeon® E5-2687v3 (3.1 GHz, 3.5T, 10-core)

### Memory
- 16 GB DDR3 1600 MHz ECC RAM
- 32 GB DDR4 2133 MHz ECC RAM
- 128 GB DDR4 2133 MHz ECC RAM

### Graphics
- NVIDIA® Quadro® K620 (2 GB) or AMD FirePro™ W2100 (2 GB)
- NVIDIA® Quadro® K4200 (4 GB) or AMD FirePro™ W5100 (4 GB)
- NVIDIA® Quadro® K6000 (12 GB) or AMD FirePro™ W9100 (16 GB)

### Storage
- Z Turbo Drive 256 GB
- Z Turbo Drive 256 GB and 1 TB SATA
- Z Turbo Drive 512 GB and 1 TB SATA

### Display
- Optional Touch display
- 15.6” QHD+ Display (3200 x 1800)
- 17.3” FHD Display (1920 x 1080) and optional DreamColor Display

### HP Z230/SOLIDWORKS Performance Benchmark*
Relative performance (higher is better)

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Processor</th>
<th>Memory</th>
<th>Graphics</th>
<th>Storage</th>
<th>Display</th>
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</thead>
<tbody>
<tr>
<td>Windows 7 Professional 64-bit*</td>
<td>Intel® Xeon® E3-1245v3 (3.3 GHz, 3.7T, quad-core)</td>
<td>8 GB</td>
<td>NVIDIA® Quadro® K600</td>
<td>256 GB SSD and 1 TB SATA</td>
<td>15.6” QHD+ Display (3200 x 1800)</td>
</tr>
<tr>
<td>HP Z220 (Quad-core) Intel® Xeon® E3-1245v3 3.4/3.8GHz, Quadro K600, HDD, 16 GB RAM</td>
<td>Intel® Core™ i7-4910MQ (2.9 GHz, 3.9T, quad-core)</td>
<td>16 GB DDR3L-1600 SDRAM</td>
<td>NVIDIA® Quadro® K2100M (4 GB) or AMD FirePro™ MS100 (2 GB)</td>
<td>Z Turbo Drive 256 GB and 1 TB SATA</td>
<td>17.3” FHD Display (1920 x 1080) and optional DreamColor Display</td>
</tr>
<tr>
<td>Windows 7 Professional 64-bit*</td>
<td>Intel® Xeon® E3-1245v2 (3.4 GHz, 3.8GHz, quad-core)</td>
<td>8 GB</td>
<td>NVIDIA® Quadro® K600</td>
<td>256 GB SSD and 1 TB SATA</td>
<td>15.6” QHD+ Display (3200 x 1800)</td>
</tr>
<tr>
<td>HP Z210 (Quad-core) Intel® Xeon® E3-1245 3.3/3.7GHz, Quadro K600, SSD, 8 GB RAM</td>
<td>Intel® Core™ i7-4910MQ (2.9 GHz, 3.9T, quad-core)</td>
<td>16 GB DDR3L-1600 SDRAM</td>
<td>NVIDIA® Quadro® K2100M (4 GB) or AMD FirePro™ M6100 (2 GB)</td>
<td>Z Turbo Drive 256 GB and 1 TB SATA</td>
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* This chart compares the HP Z210 Workstation to a similarly configured HP Z220 and HP Z230 Workstation and shows the HP Z210 Workstation with NVIDIA® K600 graphics as a baseline. This is intended to provide performance guidance for these products. All systems were tested with Windows 7 Professional 64-bit, by HP Technical Marketing in September 2013, using the SOLIDWORKS 2013 Performance Test.
SOLIDWORKS RealView learning video

Learn how to optimize the amazing real-time graphics tools in SOLIDWORKS RealView.

Learn more
hp.com/go/solidworks and hp.com/zworkstations

Screen images courtesy of Local Motors, Sage Cheshire Aerospace, and Spracher Engineering.

* Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows functionality. See microsoft.com.

1. HP Performance Advisor and HP Remote Graphics Software require internet access.

2. Requires an Internet connection to HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types and other HP ePrint details, see hp.com/go/eprintcenter). Requires optional broadband module. Broadband use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Separately purchased data plans or usage fees may apply. Print times and connection speeds may vary.

3. As compared to mainstream displays with TN (Twisted Nematic) panels when viewed at 60 degrees.

4. Multi-Core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel® 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance.

5. Each processor supports up to 2 channels of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel. Maximum memory capacities assume Windows 64-bit operating systems or Linux. With Windows 32-bit operating systems, memory above 3 GB may not all be available due to system resource requirements.

6. Intel® Xeon® E3, Intel Core i3 and Intel Pentium processors can support either ECC or non-ECC memory. Intel Core i5 and i7 processors only support non-ECC memory.

7. For hard drives and solid state drives, 1 GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 10 GB of system disk (for Windows 7) is reserved for system recovery software.