Brochure

# HP Z Workstations for Autodesk AEC and Manufacturing

**Windows 10 Pro means business.**

Accelerate Autodesk workflows with certified HP Z Workstations that help you deliver your BIM, Digital Prototyping, and 3D CAD projects in less time.



" Customers need tools that provide the power and flexibility to get their job done quickly, efficiently and to stay competitive. Autodesk and HP have partnered to provide the right solutions and together we offer our customers the hardware and software products they need to stay competitive."

– Chris Bradshaw, Senior Vice President & CMO, Autodesk

**AUTODESK**

Find more information on HP and Autodesk
Learn more

## Accelerate Autodesk workflows with HP Z Workstations

HP helps you stay ahead of the curve with professional desktop 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 BIM, Digital Prototyping, and 3D CAD projects in less time.

HP Z Workstations are certified for a wide range of Autodesk software applications, designed for tool-free easy maintenance and upgrades, and include HP Performance Advisor[1] software for system optimization and HP Remote Graphics Software[1] 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[2] for fast and high quality technical drawings and the HP Z1 All-in-One Workstation.

## HP and Autodesk

Autodesk® 3D Design Suites provide expanded toolsets, unique interoperability, and a consistent user experience. HP and Autodesk work closely together with partners Microsoft®, Intel®, AMD, and NVIDIA® to deliver a complete technology solution to Autodesk customers. As a result, HP Z Workstations deliver an enhanced experience with Autodesk 3D Design Suites, and help you take Autodesk software performance and productivity further.

## 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.

**Windows 10 Pro**

RAMSA accelerates BIM with Autodesk, HP, and NVIDIA

"At RAMSA, technology is very important because we realize that time is money for our clients and for our staff. That's why we have chosen HP and Autodesk."

– Shaun Frazier, Director of Information Technology, RAMSA



Morgan Motors Accelerates with Autodesk, HP, and NVIDIA®

"We chose HP Z workstations for many reasons. They are well-built and easy to work on, they are powerful, and they are reliable."

– Graham Chapman, Director of Engineering Morgan Motor Company

# 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 Autodesk 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 Autodesk software applications – when and where you need them, 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 Autodesk 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,[3] 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 Printers: the power in your hands >>

HP Designjet ePrinters[2] help streamline individual or multi-user Autodesk software workflows by delivering high-quality applications quickly and reliably. Plus, mobile connectivity capabilities and innovative usability features enable Autodesk users to accelerate collaboration as they take advantage of a new, easy-to-use printing experience.

# HP Z Workstation certification for Autodesk software

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



Windows 10 Pro

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## Meet the HP Z Workstation Family for Autodesk

HP offers a complete range of desktop and mobile workstations built for the challenges of AEC and Manufacturing—from digital prototyping to BIM to cinematic quality rendering, analysis, and simulation. HP ZBook Mobile Workstations are perfect for the field, travel, and the shop floor, 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 Z2 Mini**<br>designed for the workspace of the future | **HP Z240 SFF**<br>for 2D drafting and 3D modeling | **HP Z240**<br>for BIM workflows and complex datasets |
|---|---|---|---|
| Operating system | Windows 10 Pro[4] | Windows 10 Pro[4] | Windows 10 Pro[4] |
| Processor[4] | Intel® Core™ i7-6700[5]<br>(3.4 GHz, 4.0 GHz Turbo, quad-core) | Intel® Core™ i7 6700[5]<br>(3.4 GHz, 4.0 GHz Turbo, quad-core) | Intel® Core™ i7-6700K[5]<br>(4.0 GHz, 4.2 GHz Turbo, quad-core) |
| Memory | 16 GB DDR4 2400 MHz non-ECC RAM[6,7] | 16 GB DDR4 2133 MHz non-ECC RAM[6,7] | 32 GB DDR4 2133 MHz non-ECC RAM[6,7] |
| Graphics | NVIDIA® Quadro® M620 (2 GB) | NVIDIA® Quadro® K1200 (4 GB) or<br>AMD FirePro™ W2100 (2GB) | NVIDIA® Quadro® M2000 (4 GB) or<br>AMD FirePro™ W5100 (4 GB) |
| Storage | Z Turbo Drive 512 GB[8] | Z Turbo Drive 512 GB[8] | Z Turbo Drive 512 GB and 1 TB SATA[8] |

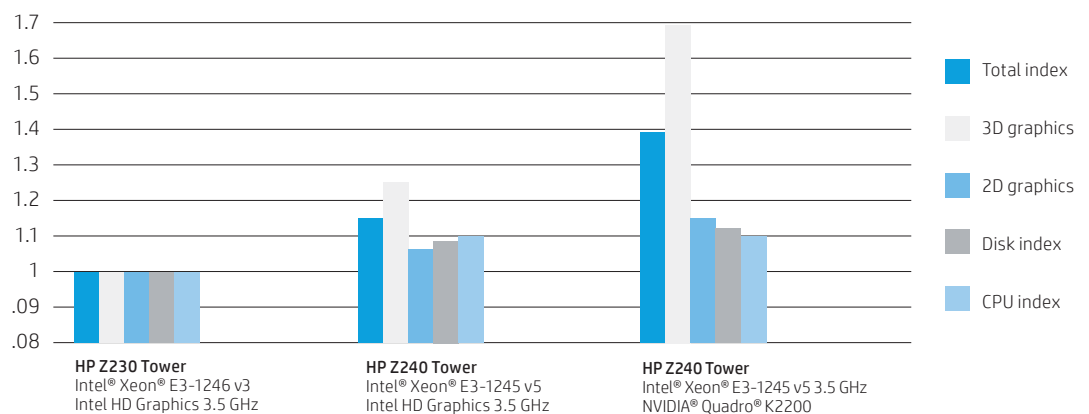|  | **HP Z840**<br>for advanced rendering and simulation | **HP ZBook Studio**<br>for mobile design and presentation | **HP ZBook15/HP ZBook 17**<br>for mobile BIM, rendering, and simulation |
|---|---|---|---|
| Operating system | Windows 10 Pro[4] | Windows 10 Pro[4] | Windows 10 Pro[4] |
| Processor[4] | 2x Intel® Xeon® E5-2687v3[5]<br>(3.1 GHz, 3.5 GHz Turbo, 10-core) | Intel® Xeon® E3-1505M v5[5]<br>(2.8 GHz, 3.7 GHz Turbo, quad-core) | Intel® Xeon® E3-1505M v5[5]<br>(2.8 GHz, 3.7 GHz Turbo, quad-core) |
| Memory | 64 GB DDR4 2133 MHz ECC RAM[6,7] | 32 GB DDR4 2133 MHz ECC RAM[6,7] | 32 GB DDR4 2133 MHz ECC RAM[6,7] |
| Graphics | Dual NVIDIA® Quadro® P6000 (24 GB) or<br>AMD FirePro™ W9100 (16 GB) | NVIDIA® Quadro® M1000M (4 GB) | NVIDIA® Quadro® M3000M (4 GB) or<br>AMD FirePro™ W6150M (4 GB) |
| Storage | Z Turbo Drive 512 GB and 1TB SATA[8] | Z Turbo Drive 256 GB[8] | Z Turbo Drive 512 GB and 1 TB SATA[8] |
| Display |  | 15.6" diagonal UHD+ UWVA IPS LED<br>anti-glare (3840 x 2160) | 15.6" diagonal LED UHD UWVA IPS<br>anti-glare (3840 x 2160) |

## HP Z240 Cadalyst Benchmark*

Relative performance (higher is better)



**HP Z230 Tower**
Intel® Xeon® E3-1246 v3
Intel HD Graphics 3.5 GHz

**HP Z240 Tower**
Intel® Xeon® E3-1245 v5
Intel HD Graphics 3.5 GHz

**HP Z240 Tower**
Intel® Xeon® E3-1245 v5 3.5 GHz
NVIDIA® Quadro® K2200

Legend: Total index, 3D graphics, 2D graphics, Disk index, CPU index

* This chart compares the HP Z240 Workstation to a similarly configured HP Z230 Workstation. This is intended to provide performance guidance for these products. All systems were tested by HP Technical Marketing in January 2016, using the Cadalyst Benchmark.

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## Graphics Optimization Guides

Featuring tips and tricks to help you accelerate your visualization workflows, along with useful information on configuring your hardware for rendering.
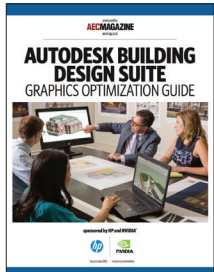


Autodesk Building Design Suite
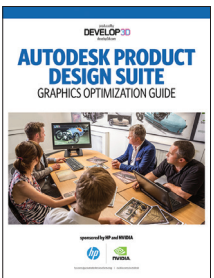


Autodesk Product Design Suite

## Learn more

hp.com/go/Autodesk
hp.com/go/AutoCAD
hp.com/go/BIM
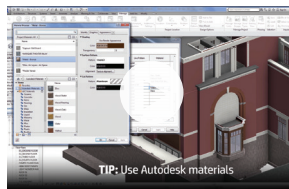hp.com/go/zworkstations

# HP and Autodesk video learning series

## Building Design Suite



Lynn Allen and Building Design Suite



Lynn Allen and AutoCAD



Optimizing Autodesk Building Design Suite



## Product Design Suite



Lynn Allen and Product Design Suite



Introduction to Visualization in Autodesk Inventor
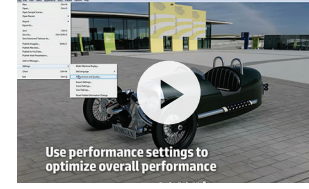


Introduction to Real-Time Rendering in Autodesk Showcase



Introduction to Iray Rendering in Autodesk 3ds Max Design

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. Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See windows.com.

5. Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering is not a measurement of higher performance.

6. Each processor supports up to 4 channels of DDR4 memory. To realize full performance at least 1 DIMM must be inserted into each channel. Actual memory speeds dependent on processor capability.

7. 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.

8. For hard drives and solid state drives, 1 GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB of system disk is reserved for system recovery software.