# **INSPIRATION** WITHOUT LIMITS

Z BY HP WORKSTATIONS HELP YOU HANDLE MORE, DO MORE, AND GIVE YOU LIMITLESS CREATIVE POSSIBILITIES.



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## RELIABILITY

Designed from the inside out, the Z by HP family was created to deliver high performance and reliability with cutting edge technologies, so you have the confidence you need to get work done.

### INDUSTRIAL DESIGN

#### **BOLD & SLEEK**

From the bold design of our desktop line, to the sleek industrial styling of our light yet rugged ZBooks, Z by HP combines stunning aesthetics with everyday practicality.

#### **TOOL-FREE CUSTOMIZATION**

Easily expand your system with ease as your workflow changes. The Z by HP line features tool-less chassis to make installing more memory, storage, and I/O options a breeze.

#### PERFORMANCE YOU WON'T HEAR

Uncluttered, modular interior layout maximizes airflow to keep components running at optimum performance, and industry-leading acoustics technology keep systems quiet.



### CERTIFIED. SECURE.

#### THE WORLD'S MOST SECURE

Protect your data and privacy, wherever and whenever you work, with our industry leading security features. HP Sure View<sup>2</sup>: Guard your screen from prying eyes with the world's only PCs with integrated privacy screens. HP Sure Start Gen 4<sup>3</sup>: Self-healing protection automatically recovers the BIOS and other critical firmware.<sup>4</sup> System Intrusion Sensor: Get an alert when the side panel of your system has been tampered with, exposing valuable components.<sup>1</sup>

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#### TESTING BEYOND INDUSTRY STANDARDS

Desktop Z products are tested to a minimum of 368,000 total test hours in the HP Total Test Process and HP ZBooks are tested to 14 MIL-STD-810G standards. Extreme stress tests such as drop, vibration, temperature, shock, dust and more ensure optimized performance.

#### CERTIFICATION FOR EVERY INDUSTRY

HP works closely with Independent Software Vendors such as Autodesk<sup>®</sup> and Adobe<sup>®</sup> to help ensure that the most popular applications are thoroughly tested and certified to work on Z by HP products.

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### A LONG-TERM INVESTMENT

#### HP STABLE AND CONSISTENT OFFERINGS

Select your hardware and software components when you customize your HP Z configuration and rest assured that you'll be able to purchase the same configuration throughout the deployment of the product.



### UNIQUE FEATURES

Go beyond the basics to maximize your experience and make IT management easy.



## **UNIQUE FEATURES**

FOR PROFESSIONAL DESIGNERS AND CREATORS



#### HP DREAMCOLOR DISPLAYS

Featuring a palette of over one billion colors, you'll get precise color accuracy and consistent color across your entire digital workflow.



#### **HP Z TURBO DRIVE**

Experience ultra-fast storage speeds with the HP Z Turbo Drive G2, an innovative NVMe PCIe-based SSD storage solution that reduces system bottlenecks, boot up, calculation and graphics response times, even with 4K video!

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#### LEARN MORE



#### **HP PERFORMANCE ADVISOR<sup>5</sup>**

A simple, effective way to ensure your Z by HP product is operating at its peak potential, pre-installed Performance Advisor software helps you configure and customize your system for each new application and driver you install.



#### HP REMOTE GRAPHICS SOFTWARE TO ZCENTRAL REMOTE BOOST<sup>6</sup>

Seamless remote access to your Z by HP product. Preloaded on our entire family, HP RGS allows you to collaborate on graphics projects in real time, or work from any location on any PC, Mac, MacBook, Windows Tablet, or Thin Client.

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### WHEN INSPIRATION STRIKES, THE HP ZBOOK IS THERE.

Select your perfect match of form, function and features from our broad portfolio.

## **THIN & LIGHT**

#### HP ZBOOK FIREFLY 14 & 15

Our thinnest, lightest ZBooks ever provide true portability for people who push a standard laptop past its breaking point.

#### **HP ZBOOK FIREFLY 14**

**OPTIMIZED MOBILITY.** At 2.96 lbs, you get high performance without the weight. And with the latest connectivity<sup>7,8</sup> and security features, you don't have to worry about losing data when you're on the move.

**PRO-LEVEL PERFORMANCE.** Power through projects with 10th Gen Intel processors. Open big files and run multiple apps for speedy multitasking and productivity.

#### CAPTIVATING VIEWING EXPERIENCE.

Get a stunning Display HDR certified display with 550 nits of brightness.

#### **HP ZBOOK FIREFLY 15**

**OPTIMIZED MOBILITY.** At less than 3.74 lbs<sup>9</sup>, you get high performance without the weight. And with the latest connectivity<sup>8</sup> and security features, you don't have to worry about losing data when you're on the move.

**PRO-LEVEL PERFORMANCE.** Power through projects with 10th Gen Intel processors and industry leading NVIDIA® Quadro® graphics. Open big files and run multiple apps for speedy multitasking and productivity.

**CAPTIVATING VIEWING EXPERIENCE.** With a 15 inch diagonal screen, you can work in multiple tabs and windows for maximized productivity. And with a full-size numeric keypad, you can get through data-driven tasks in HP SureView Reflect, you don't have to worry about protecting your data.



### DESIGN AND PERFORMANCE IN ONE

#### **HP ZBOOK STUDIO & STUDIO X360**

Featuring HP's Brightest 4K UHD laptop display, the ZBook Studio and ZBook Studio x360 are ideal for the creative professional seeking to up-level and accelerate their work with more performance or the flexibility of a 360-degree hinge.



#### **ZBOOK STUDIO**

**PERFORMANCE.** 6-core Intel<sup>®</sup> Core<sup>™</sup> i9 or Intel<sup>®</sup> Xeon<sup>®</sup> processors designed to handle multi-threaded applications like Adobe<sup>®</sup> Premiere Pro<sup>®</sup>.

• .....

**GRAPHICS.** Seamlessly edit designs and render multi-layered files with certified NVIDIA<sup>®</sup> Quadro<sup>®</sup> P2000 graphics.

**DISPLAY.** Take your work outside with the anti-glare display and built-in ambient light sensor that dims or brightens based on your surroundings.<sup>13</sup>

#### **ZBOOK X360**

**INKING.** Create on the go with the Wacom AES pen featuring 4,000 pressure sensitive levels, tilt, and two customizable buttons.<sup>14</sup>

**PERFORMANCE.** 6-core Intel<sup>®</sup> Core<sup>™</sup> i9 or Intel<sup>®</sup> Xeon<sup>®</sup> processors designed to handle multi-threaded applications like Adobe<sup>®</sup> Premiere Pro<sup>®</sup>.

**GRAPHICS.** Seamlessly edit designs and render multi-layered files with certified NVIDIA® Quadro® P2000 graphics.<sup>12</sup>

**DISPLAY.** Take your work outside with the anti-glare display and built in ambient light sensor that dims or brightens based on your surroundings.

### ONE LIFE DEVICE FOR WORK AND PLAY

#### **ZBOOK STUDIO G7 AND ZBOOK CREATE G7**

**RELIABLE PRO PERFORMANCE.** Meet all of your needs whether you're designing, creating, or streaming with NVIDIA<sup>®</sup> Quadro<sup>®</sup> graphics, 10th Gen Intel processors, and up to 32 GB of memory with pro NVIDIA<sup>®</sup> Quadro<sup>®</sup> or NVIDIA<sup>®</sup> GeForce<sup>®</sup> graphics.

**MEANINGFUL DESIGN.** Create easily on the go without worrying about battery life or size. The nearly borderless screen allows you to get all the space you need to work without the weight.

**COLOR ACCURACY.** Rest assured that the color you see is the color you get with optional Next Gen DreamColor display with over a billion colors and 100% DCI-P3 coverage.

### AFFORDABLE PERFORMANCE

Supercharge your projects on a high-performance laptop that packs a punch at a low cost. With high speed processors and graphics certified for peak performance, get the job done on time without breaking the bank.

#### **ZBOOK 15V**

**PERFORMANCE.** Next generation 6-core Intel<sup>®</sup> Xeon<sup>®</sup> processors designed to handle complex, multi-threaded apps.

**GRAPHICS.** Tackle complex 2D and 3D models with certified NVIDIA® Quadro® graphics Ultimate Performance.

**CERTIFIED.** We've partnered with leading software providers like Autodesk and SolidWorks to ensure the HP ZBook 15v is optimized for peak performance.

### ULTIMATE PERFORMANCE

#### HP ZBOOK 15 & 17

Our powerhouse ZBooks thrive with heavy workloads from rendering to engineering to simulation. Both VR-ready, you can easily incorporate immersive technology into your workflow.



#### **ZBOOK 15**

**PERFORMANCE.** Get blazing-fast performance with the heaviest multi-app and VR workloads with next gen, VR-ready NVIDIA® Quadro® graphics.

**DISPLAY.** With a powerful, bright HP DreamColor panel<sup>15</sup> of 600 nits and 1 billion possible colors, what you see is what you get.

**SECURITY.** Protect your work with industry-leading security features. HP Sure View<sup>16</sup> privacy screen stops visual hacking, and RAID 1 keeps a backup copy of all of your files.

#### **ZBOOK 17**

**PERFORMANCE.** Blitz render times and speed through multi-app workflows with next gen NVIDIA® Quadro® graphics, 128 GB of memory<sup>2</sup> and multiple cores.

**DISPLAY.** Get a studio quality experience anywhere with the 7" diagonal HP DreamColor anti-glare display.<sup>17</sup>

**CUSTOMIZATION.** With up to 50 million custom configurations, there's a perfect solution for your requirements.

### CUT THROUGH YOUR TOUGHEST JOBS WITH OUR Z BY HP DESKTOPS

Built for power-intensive workloads and customizable to your exact demands.



### **STEP UP TO OUR MOST AFFORDABLE Z DESKTOP**

#### MORE EXPANDABLE | MORE POWERFUL | MORE SUSTAINABLE

World-class performance within reach. Go beyond a PC. Upgrade to a Z.

#### HP Z1 TOWER UNCOMPROMISING PERFORMANCE.

Design, edit, or work in VR without constraints with 10th Gen Intel<sup>®</sup> Core<sup>™</sup> processors, NVIDIA<sup>®</sup> Quadro<sup>®</sup> or NVIDIA<sup>®</sup> GeForce<sup>®</sup> graphics, and more.

**CERTIFICATION.** Know your desktop is tested and certified for your most critical apps right out of the box.

**SECURITY.** Enhanced security features such as HP Sure Start Gen 6, HP Sure Run Gen 3, and other HP security suite features come standard on every Z1 Entry Tower.

**SUSTAINABLE.** Planned to have ePEAT® Gold Certification in multiple countries including the US.



### FLEXIBLE ENTRY SOLUTIONS HP Z2 MINI, HP Z2 SMALL FORM FACTOR, HP Z2 TOWER

Compact, clever, and shockingly powerful. Perfect for Architecture and Product Design workflows.

#### **HP Z2 TOWER**

**PERFORMANCE.** Crush multi-threaded workflows with pro graphics and 8-core Intel CPUs. We redesigned our proprietary motherboard to unlock an extra 8% boost, for an epic 41% performance increase over last gen.<sup>4</sup>

**EXPANDABLE.** Need to swap graphics cards? Increase CPU power? Add specialized PCIe cards? Go for it.

**DESIGN.** Stunning new design features front and rear ledges, so you can easily move your system from location to location.

#### HP Z2 SMALL FORM FACTOR

**PERFORMANCE.** Crush multi-threaded workflows with pro graphics and 8-core Intel CPUs. We redesigned our proprietary motherboard to unlock an extra 8% boost, for an epic 41% performance increase over last gen.

**CUSTOMIZATION.** Build a system matched exactly to your needs with over a million possible configurations. Customizable I/O ports support new, legacy and specialized equipment without messy dongles.

**EXPANDABLE.** With dual M.2 storage slots you can install pro-grade storage hardware to unlock your storage-bound apps without sacrificing standard PCIe slots.

#### HP Z2 MINI

**PERFORMANCE.** With 33% faster CPUs, get reliable performance with multi-threaded apps. Our efficient thermals keep it cool and quiet. Intel<sup>®</sup> Xeon<sup>®</sup> processor options for powerful performance.<sup>22</sup>

**VERSATILE.** Create the ideal setup - mount under a desk, behind a display or in a rack.<sup>22</sup> Connect to multiple displays and other hardware with plenty of I/O ports.

**DISPLAYS.** Drive up to six displays—four native and two additional with daisy chaining.



### DISRUPTIVE DESKTOP POWER FOR THE MOST INTENSE WORKFLOWS

#### HP Z8, Z6 & Z4

Our most powerful offerings deliver reliable performance and extreme power for cutting edge use cases such as machine learning, complex simulations, and VR creation in mind.

### HP Z8

**PERFORMANCE.** With up to a staggering 56 cores, 3 TB high-speed memory and certification for hardcore apps, you get optimal performance every time.

**OPTIMIZED.** ML developers GPU-accelerated algorithm development tools with support for the NVIDIA® Deep Learning SDK and many widely used deep learning frameworks.

**EXPANDABLE.** Strategically placed ducts and fans keep parts cool and quiet, while tool-free access and easy-open latches make upgrading easy.

#### HP Z6

**EXPANDABLE.** Invest only in the technology you need now, knowing you can scale up easily over time. With full expansion capability—from processors, to graphics cards, to memory—you create your own upgrade path.

**PERFORMANCE.** Power through complex design iterations with 48 highperforming cores, advanced pro graphics and a monumental 384 GB of memory.

**STORAGE.** Install the fastest professional grade storage hardware around, unlocking performance for storage-bound applications without sacrificing standard PCle slots.

### HP Z4

**CUSTOMIZABLE.** Create a desktop custom built for your workload demands. You're in control with multiple component options, plus more standard features and space to expand than other single-processor Z desktop.

**FLEXIBLE.** High-frequency processing, multiple cores and powerful graphics let you move from single-threaded tasks to multi-threaded tasks.

**POWER.** Experience disruptive priceperformance on multi-threaded applications, or combined workflows with Intel<sup>®</sup> Core™ X-Series processors.

USIGNED FOR HEAVY WORKLOADS IN VFX.

### CUTTING-EDGE POWER FOR VIRTUAL REALITY

The full potential of VR is brought to life with HP's powerful, wearable, VR PC.

## THE WEARABLE, VERSATILE VR PC

Unlock the potential of VR with a wearable PC optimized for free-roam. From location-based entertainment to training to design, pioneer new experiences using extreme power in a compact wearable.

LEARN MORE

#### **HP VR BACKPACK**

**GRAPHICS.** NVIDIA<sup>®</sup> GeForce<sup>™</sup> graphics paired with Intel<sup>®</sup> Core<sup>™</sup> processors let you fly through VR work. And with ISV-certification for demanding apps like VRED<sup>®</sup> and Revit<sup>®</sup>, workflow integration is seamless. **DESIGN.** We've optimized the design of our wearable PC for comfort and simplicity. With improved ergonomics, battery management and ease of movement, this is free-roam VR made easy.

**FLEXIBILITY.** Accelerate VR work. Dock for desktop-quality development. Throw on the backpack for quick reviews and iteration. Host fully immersive end-user experiences. All with one hybrid PC.



### THE NEW BENCHMARK IN COMMERCIAL VR.

#### HP REVERB G2 VR HEADSET & VR READY PRODUCTS

Discover the ultra-light, ultra-immersive headset with double the resolution that's changing the game. It's virtual reality as you always imagined it.

#### HP REVERB G2 VR HEADSET

**VISUAL.** Harness the full immersive power of VR with new Valve designed audio and lenses offering a staggering 2160x2160 resolution per eye, 114 degrees field of view making it easier to see textures and text more clearly.

**DESIGN.** More streamlined. More comfortable. More wearable.<sup>25</sup> This lightweight HMD offers long-lasting comfort, deep immersion and a natural viewing experience. HP Reverb G2 features include an improved face mask cushion and speakers set 10mm away from the ears for increased comfort.

COMPATIBILITY. ACCESS ALL OF YOUR VR CONTENT

Windows MR and SteamVR compatibility plus integrated Bluetooth® makes for easy syncing and superb controller tracking.



#### **Z BY HP VR READY PRODUCTS**





Performance HP Z Desktop Workstations: **HP Z4/Z6/Z8**<sup>26</sup>



### EVERY Z BY HP PRODUCT DESERVES A BRILLIANT DISPLAY

From CAD models to editing photos, work comes alive on HP's highest performance displays that deliver remarkable color across your workflows. Select the size, resolution and connectivity to fit the way you work.<sup>16</sup>



### **REVEAL THE BRILLIANCE OF YOUR WORK**



#### **4K DISPLAYS**

Experience precise 10-bit color in stunning 4K<sup>1</sup> resolution. Use one powerful USB-C<sup>™</sup> connection to get to work fast and de-clutter your workspace.

- HP Z43
- HP Z32
- HP Z27

#### **HP Z DISPLAYS**

Be a productive powerhouse on one large screen or multiple-display setups.<sup>15</sup> Choose from a wide selection of factory calibrated displays that deliver reliable color consistency and versatile connectivity options ranging from VGA to USB-C<sup>™</sup>.

- HP 24nf
- HP Z23n
- HP Z22n

#### HP DREAMCOLOR DISPLAYS

Captivate your audience with bright, rich colors and intense shadow detail. Our extensive color spectrum offers over one billion colors with DCI P3 and Adobe RGB coverage for exceptionally smooth transitions.

- HP Z27x G2
- HP Z31x
- HP Z24x



### LEARN MORE, VISIT OUR WEBSITE

HP.COM/Z

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#### **ENDNOTES**

- <sup>1</sup> Based on HP's unique and comprehensive security capabilities at no additional cost among desktop and mobile workstation vendors as of July 2018 on HP Desktop Workstations and as of January 2017 on Mobile Workstations with 7th Gen and higher Intel<sup>®</sup> Processors.
- <sup>2</sup> Up to 128 GB memory is an optional, configurable feature.
- <sup>3</sup> Based on currently available, in-market mobile workstations, as of January 25, 2018 having physically embedded, hardware-based privacy screen. Available on select HP Mobile Workstations only.
- 4 41% total performance increase based on Cinebench test (multi-threaded apps) comparing Intel® Core™ i9-9900K on newly designed motherboard to Intel® Core™ i7-8700K.
- <sup>5</sup> HP Performance advisor require internet access.
- <sup>6</sup> HP Remote Graphics software require internet access.
- <sup>7</sup> Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 (802.11ax) are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ax devices.
- <sup>8</sup> Weight will vary by configuration.
- <sup>9</sup> Represents performance change on applications that utilize the graphics performance generation over generation moving from 2 GB of VRAM to 4GB of VRAM.
- <sup>10</sup> 4K UHD 3840 x 2160 resolution display is an optional feature and requires configuration at purchase.
- <sup>11</sup> Touch display is an optional feature and requires configuration at purchase.
- <sup>12</sup> NVIDIA Quadro<sup>®</sup> P2000 graphics is a configurable option.
- <sup>13</sup> Ambient light sensor only available on select models with standard and full UHD (not available with HP DreamColor or HP Sure View display models).
- <sup>14</sup> Wacom AES pen optional and only available with certain configurations.
- <sup>15</sup> 128 GB RAM planned to be available in December 2018
- <sup>16</sup> HP Sure View integrated privacy screen is an optional feature that must be configured at purchase and functions in landscape orientation. Planned to be available in October 2019.
- <sup>17</sup> DreamColor display required for 1 billion colors and is an optional or add on feature.
- <sup>18</sup> Requires Windows and Intel<sup>®</sup> or AMD 7th or 8th generation processors.
- <sup>19</sup> HP Sure Start Gen4 is available on HP Elite and HP Workstation products equipped with 8th generation Intel® or AMD processors.
- <sup>20</sup> 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 will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
- <sup>21</sup> 33% total performance increase based on Cinebench test (multi-threaded apps) comparing Intel® Core™ i9-9900K to Intel® Core™ i7-8700K.
- <sup>22</sup> Mounting hardware sold separately.
- <sup>23</sup> 6 display solution is achieved using a combination of Intel<sup>®</sup> HD graphics and NVIDIA<sup>®</sup> Quadro<sup>®</sup> graphics and is ONLY supported on Windows 10.
- <sup>24</sup> Must be configured with HP approved VR Ready graphics and CPUs.
- <sup>25</sup> See product QuickSpecs for exact specifications.

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