OVERVIEW
COMMERCIAL VR SOLUTIONS



ARE YOU READY?

Get VR Ready with the world's most comprehensive virtual reality portfolio from HP.[1] From a high resolution head-mounted display to a free-roam experience solution that doubles as a compact desktop, HP delivers tomorrow's technology today.



COLLABORATE

Work together anywhere, from team meetings to project reviews.

- Compatible with Windows Mixed Reality & SteamVR
- Host team meetings, project reviews, and working sessions virtually.

CREATE

Seamlessly switch between virtual and real world content creation.

- Plan, prototype, simulate and review remotely in true-to-scale environments.
- Focus on the work with comfortable, natural immersion.

CONNECT

Enjoy social VR experiences and take a break from the real world.

- VR takes immersive gaming to another level.
- Now you can be an active first-party participant, whether in a game or in a virtual meet-up.

LEARN

Learn without leaving the living room.

- Visualize concepts, explore new perspectives, take field trips, and do experiments.
- Hands-on personalized learning with customizable curriculums and educational partner platforms.

TRENDS:

CHANGE HAPPENS

Customer needs are evolving as business, culture, and technology evolves. HP focuses on the power of design, freedom of security, and meaningful collaboration to help businesses adapt to changes - and opportunity. HP frames changes in the way people work in terms of workforce, workplace, and workstyles. HP delivers holistic customer experiences; evaluating how all hardware, firmware, OS, and applications work together for the benefit of the user. This thinking guides HP's innovation agenda and helps customers build their own Office of the Future with design, security, and collaboration.

BUSINESS MATTERS:

SECURITY & MANAGEABILITY

A PC decision is a security decision. HP's VR Ready portfolio features Z by HP product lines, with security anchored in the hardware and spanning the OS, applications, and even web browsers - all to protect your devices, data, and identity from ever-evolving security threats. And, with HP Device as a Service (DaaS), you can improve device reliability and performance, increase user productivity, and reduce the workload for IT when HP puts its unified endpoint management expertise and actionable analytics to work for you.



EVERY COMPANY HAS A REASON TO USE VR

HP takes a focused approach to lead VR-for-enterprise, driving adoption in healthcare, education, product development, architecture/engineering/construction (AEC), training, and location-based entertainment (LBE). Across these core industries, VR provides tangible ROI, from cost-savings to improved customer engagement.

Healthcare

VR enables healthcare providers to deliver consistent, updated personnel training, and improved patient experiences. Healthcare applications of VR include training, general wellness, physical fitness, and more. We work closely with industry-leading software pioneers, to make sure what we offer is best-in-class.

LBE

LBE is the VR experience with which consumers are most familiar. LBE VR leaves little to the imagination, enabling participants to be a part of realistic experiences like riding a rollercoaster or touring Rocky Mountain National Park.

Media & Entertainment

Filmmakers are also experimenting with VR, from creating supplemental VR experiences for feature films like *How to Train Your Dragon*, to producing entire cinematic works in VR. The latter is becoming common on the film festival circuit: at the 2018 TriBeCa Film Festival, both *HERO* and *The Jack Project* are VR projects powered by the HP VR Backpack.

AEC & Product Development

The world of AEC & product development will be forever changed thanks to VR's ability to significantly shorten design & development cycles. A design team can create plans and prototypes in VR, adjust based on team feedback and simulations - all before producing a physical product. Automotive manufacturers have been quick to see the advantages of the technology, using 3D sketching tools to build car models in a VR environment or integrating VR into showrooms to offer potential car buyers a more seamless way to explore their options. Architects find VR design reviews a compelling medium for customer experiences - with true-to-scale environments, you can truly get a realistic sense of the design.

Training

VR has become an incredible training tool across many different industries. Participatory learning has been proven more effective than passive methods - such as reading for comprehension - across skill sets. Training soldiers or first responders can be dangerous and cost-prohibitive; high-risk virtual training scenarios save time, money, and lives. Industrial manufacturing employees can be holistically trained in immersive environments rather than on the shop floor. VR developers can create and interact with complex simulations while maintaining total VR immersion in any situation.

Education

Multiple studies suggest retention rates skyrocket when students participate in immersive learning. VR offers hands-on, experiential learning while providing schools and universities cost-friendly alternatives to building and maintaining expensive facilities, such as science labs. With the ability to go inside, students gain deeper, more meaningful perspectives into historical events, cultural movements, and scientific principles.



EXPERIENCE NEXT-LEVEL IMMURSION WITH HP'S HYPER-REALISTIC HEADSET





HP REVERB G2 VR HEADSET

Developed in collaboration with Valve and Microsoft, our breakthrough VR headset delivers a more immersive, comfortable, and compatible experience.

Equipped with industry-leading lenses and speakers designed by Valve, our HMD provides the high quality resolution and fully immersive spatial audio.

Now, track more movement over the previous generation with four cameras built into the headset, for an infinite tracking area. And with a more ergonomic design, our controllers are more comfortable to hold onto.

At 9.3 million pixels, get 2.5x more pixels than Oculus Rift S.[3] Interpupillary distance (IPD) adjustment allows you to adapt the width of the lenses for different eye distances, so you get a perfect fit.

Increased cushion size allows for even weight distribution. Flex material and magnetic detachability provide a custom fit, no matter your face shape or size.

2160 x 2160 LCD panel resolution per eye
114-degree field of view
90Hz refresh rate*
2-in-1 cables for VR setup options
Support for SteamVR & Windows Mixed Reality ecosystems

STEAMVR™ +

*To enable full 90Hz performance, a DisplayPort™ 1.3 or later connection is required with the graphics solution provided by the PC.



THE INSIGHTS YOU NEED TO REVOLUTIONIZE VR





HP OMNICEPT SOLUTION

Together, our HP Reverb G2 Omnicept Edition and our intelligent Omnicept platform capture & interpret the human condition to allow for intelligent & adaptive XR experiences.

Integrated sensors and proprietary algorithms measure muscle movement, pulse, pupil size and gaze to scientifically capture the level of brain power users exert in a VR session. Now, users' natural responses drive their experience in the moment.[14]

Our platform includes real-time developer tools for data-driven insights. Combining our sensor data with machine learning, you can now design applications that adapt to each user like never before.[14]

With industry-leading lenses and speakers designed by Valve, high quality resolution - 2160x2160 per eye - and foveated rendering,[15] this HMD delivers lifelike VR like never before. And enjoy a comfortable fit with adjustable IPD and headstrap.

HMD firmware safeguards sensor data at every moment of capture and no data is stored on the headset. HP Omnicept powered applications help ensure the capture and transfer of data comply with GDPR and keep user data confidential.[14]

2160 x 2160 LCD panel resolution per eye
114-degree field of view
90Hz refresh rate*
Eye tracking with pupillometry, heart rate, face camera
6 meter cable
Support for SteamVR & Windows Mixed Reality ecosystems

STEAMVR™ +

*To enable full 90Hz performance, a DisplayPort™ 1.3 or later connection is required with the graphics solution provided by the PC.

DISCOVER THE FREEDOM OF HP'S VR READY MOBILE LINE-UP



HP ZBOOK STUDIO G8

The World's most powerful workstation of its size[18] has the power to free the creative mind.

With up to NVIDIA® RTX™ A5000 or GeForce RTX™ 3080 laptop GPUs[2] and Intel® Core™ i9 vPro® CPUs[2,3,4] you can animate in seconds and render or visualize in real time.

At less than 4lbs,[18] with long-lasting battery life, and built-in noise suppression, this sleek PC is designed so you can work and game from anywhere.

The HP DreamColor display with 100% DCI-P3 coverage is PANTONE® validated for complete color accuracy. Get smooth motion with a 120 Hz refresh rate for high-speed video and gaming.[19]

Windows 10 Pro 64[10]
Intel® Core™ i9[11]
NVIDIA® RTX™ A5000
GeForce RTX™ 3080
32 GB DDR4 Memory
512 GB PCIe® M.2 SED SSD Storage[12]



HP ZBOOK FURY 15 G8

The desktop-caliber performance of our ultimate ZBook now comes in a sleek, slim design. Seamlessly create, render, and edit with incredible power that's never been so mobile.

Get unthrottled[20] performance from Intel® CPUs and up to NVIDIA RTXTM A5000 or AMD Radeon Pro laptop GPUs.[2] Work and ray-trace simultaneously.[3] This PC thrives on multi-app work.

Get desktop-level storage and memory with slots for up to 128 GB RAM[21] and capacity for a 8TB hardrive.[17] Expansion is simple with tool-free access and an extensive port selection.

At just 26mm thin[22] and 6lbs, our flagship ZBook is extreme performance from anywhere. HP Sure View Reflect[5] guards from prying eyes and built-in software reduces background noise.

Windows 10 Pro 64[10]
Intel® Core™ i7/i9 or Xeon®[11]
NVIDIA® RTX™ A4000/A5000
16 GB DDR4 3200MHz Memory
512 GB PCIe® SSD Storage[12]

SECURITY COMES STANDARD ON Z BY HP
VR READY DESKTOP WORKSTATIONS



HP Z2 SFF G9

Tower power in a fraction of the size. Re-engineered to fit full-height, full-length graphics, the Z2 SFF delivers high performance for your intensive workflow—from 3D design to real time ray tracing.

This system is future proof and designed for VR with professional graphics.

- Windows 11 Pro[9]
- Intel® Core™ vPro or K-Series[10]
- NVIDIA® RTX™ A4000
- 128 GB DDR5 Memory
- 512 GB PCIe® SSD M.2[11]



HP Z2 TOWER G9

We've engineered a whole new level of performance for entry workstations, so you can cut through rendering and visualization without missing a beat.

Immerse yourself in the future with a device that's VR ready with professional graphics—NVIDIA RTX™ or AMD Radeon™ Pro—and an Intel® Core™ processor

- Windows 11 Pro[9]
- Intel® Core™ vPro or K-Series[10]
- NVIDIA® RTX™ A5000
- 128 GB DDR5 Memory
- HP Z Turbo Drive M.2 512 GB[11]



HP Z4 G4

Our most popular Z desktop workhorse accelerates a wide range of pro apps and gives you more standard features and space to expand than any other single-processor Z desktop.

Move between single-threaded tasks like 3D CAD to multi-threaded tasks like rendering and simulation seamlessly.

- Windows 10 Pro 64[9]
- Intel® Core™ i9[10]
- NVIDIA® Quadro RTX™ 8000
- 32 GB DDR4 Memory
- HP Z Turbo Drive M.2 2 TB[11]



HP Z6 G4

A future-proof powerhouse that scales up easily over time, thanks to full expansion capabilities - from single or dual processors and multiple graphics cards to massive storage options.

Get breakthrough performance for photo-realistic design, modeling and content creation done in real-time.

- Windows 10 Pro 64[9]
- Intel® Xeon®[10]
- NVIDIA® Quadro RTX™ 8000
- 64 GB DDR4 Memory
- HP Z Turbo Drive M.2 2 TB[11]



HP Z8 G4

Max out on performance with the world's most powerful workstation.[4]

When you work with complex simulations, data analysis or high-end VFX, only the best will do. Cut through your toughest jobs with our flagship Z—built for power-intensive workloads.

- Windows 10 Pro 64[9]
- Intel® Xeon®[10]
- 2x NVIDIA® RTX™ A6000
- 128GB DDR4 Memory
- HP Z Turbo Drive M.2 2 TB[13]

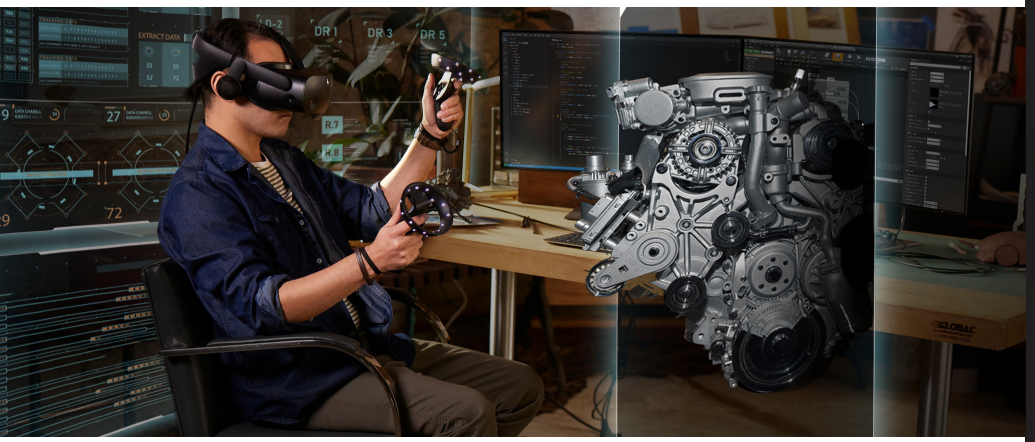




EVOLVE YOUR WORKFLOW

In 2017, HP entered the VR landscape as a major player with the revolutionary HP Reverb G2 Omnicept Edition and continue to lead the way in 2022 with no-compromise HP Reverb VR Headset G2 developed in collaboration with Valve and Microsoft. Today, we're on a trajectory to become not only a leader in hardware, but in VR solutions. HP is driving end-to-end VR adoption in enterprise – from content creation to consumption.

To address the need for VR content development & deployment, we recently rolled out our **HP VR ISV Program**, a collaborative initiative that pairs industry-leading VR solutions with HP's powerful VR Ready portfolio. HP is building a VR shop with a **global infrastructure** that offers customers peace of mind with reliable, replicable solutions.



80+

The number of years that HP has led the way in innovation & engineering, from an audio oscillator to the world's most powerful wearable PC[13]



PRODUCT SPECIFICATIONS SHOWN ARE A STARTING POINT FOR CONFIGURING YOUR VR READY MACHINE. RECOMMENDATIONS MAY VARY GREATLY DEPENDING ON YOUR SPECIFIC USE CASE.

LEARN MORE AT HP.COM/GO/VR OR WORK WITH A LOCAL HP SALES REP.

LEARN MORE

DISCLAIMERS

1. Based on non-gaming VR ready PCs and accessories as of April 2019.
2. Based on HP's internal analysis of total pixels as of April 2020.
3. Based on workstations as of September 25, 2017 and power based on processor, graphics, memory, and power supply.
4. HP Sure View Reflect integrated privacy screen is an optional feature that must be configured at purchase and operates in landscape orientation.
5. Based on HP's unique and comprehensive security capabilities at no additional cost among desktop workstation vendors as of September 2017 on HP mobile workstations with 7th Gen and higher Intel processors.
6. Based on wearable VR PCs as of March 26, 2019 and power based on processor, graphics and memory.
7. Based on 3DMark 11 internal testing comparing to the HP Z VR Backpack G1.
8. 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 http://www.windows.com
9. Your product does not support Windows 8 or Windows 7. In accordance with Microsoft's support policy, HP does not support Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 drivers on http://support.hp.com
10. For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 16GB (for Windows 7) and 36GB (For Windows 8.1/10) or system disk is reserved for the system recovery software.
11. HyperX is a registered trademark of Kingston Technology Corporation. Actual product may vary from image shown on datasheet.
12. Actual formatted capacity is less. Portion of internal storage is reserved for pre-loaded content and system recovery software. For storage drives, TB = 1 trillion bytes.
13. VR application compatibility required. HP Omnicept can be downloaded from the HP Developer Portal (https://developers.hp.com/). Available in select countries. For complete details see hp.com/omnicept.
14. The HP foveated rendering Unity plug-in is available separately along with its corresponding run-time (Unity Store or HP Developer's Portal). NVIDIA RTX or GTX 16 graphics required.
15. Based on HP's internal analysis of 15" ISV certified mobile workstations as of November 1, 2020 power based on maximum processor, graphics, memory, and power supply.
16. For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB of disk is reserved for system recovery software.
17. Based on HP's internal analysis of thermal design power per/cm3 based on competitor max graphics, max processor, and max power delivery from CPU and GPU on non-gaming mobile workstations with a minimum 3 ISV certs, configurable professional graphics, and a dedicated workstation brand as of April 2020.
18. Starting at weight. Weight will vary with configuration.
19. DreamColor is an optional feature that must be configured at purchase.
20. Unthrottled in Best Performance Mode and when plugged in.
21. Up to 128GB memory is an optional, configurable feature
22. Starting at weight and dimensions. Weight will vary by configuration.

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