



HP Z VR Backpack G1 Workstation

The full potential of VR is brought to life with the most powerful wearable VR PC ever created.² Experience what fully immersive and untethered VR can bring to your work.

HP recommends Windows 10 Pro.¹



Untether from reality

The light, comfortable backpack design and hot swappable batteries provide unrestricted freedom within your immersive experience. Work, demonstrate, or train people with VR without getting tangled up in cords.

Extreme power takes rich content head on

Experience high-end performance VR even under the most strenuous demands of complex simulations. Best-in-class processing power and the latest high-fidelity graphic card help prevent disruptive dropped frames so you can work in VR for as long as you need.

Design and test at the speed of innovation

Take full advantage of VR's potential using streamlined production tools. The dock lets you quickly transition back and forth between high powered desktop for content design and wearable VR PC to validate your creations.

Featuring

- Integrate Windows 10 Pro, the gold standard for commercial operating systems into your VR experience, complete with powerful security, collaboration, and connectivity features.¹
- A professional wearable VR PC that fits in a lightweight 10.25 lb/4.6 kg backpack without the need for long cords.³
- Transition in a snap between a wearable VR PC and a desktop environment with the sturdy and easily connected docking station.
- Maintain total VR immersion in any situation with the latest NVIDIA® Quadro® P5200 GPU with 16 GB of memory.
- Freely choose your preferred VR HMD, or use our custom integration for the HTC Vive BE or the HP Windows Mixed Reality Headset.⁴
- A VR backpack solution designed with your IT systems in mind, featuring Intel® vPro™ with iAMT, TPM 2.0 security, and a commercial BIOS.
- Avoid interrupted VR immersion due to unwieldy power cords or dead batteries with our dual-battery system that allows swapping power cells on the fly.
- View the virtual world from the outside in real time via Miracast connection to an external display.
- Nothing slows you down with the with the latest 7th generation CPU design from Intel®.⁵
- Keep working steady under the heaviest VR data loads with 32 GB dual channel DDR4 system memory.
- A rugged, wearable VR PC that stands up to extreme durability with 120,000 hours of HP testing and is designed to pass MIL-STD 810G tests.⁶
- The harness is made of durable, easy-fitting mesh designed to keep you comfortable.

HP Z VR Backpack G1 Workstation Specifications Table



Form Factor	Backpack when worn, compact PC when docked.
Operating System	Windows 10 Pro 64 – HP recommends Windows 10 Pro. ¹
Processor Family	7th Generation Intel® Core™ i7 processor ⁴
Processors^{2,4}	Intel® Core™ i7-7820HQ (2.9 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores)
Chipset	Intel® QM175
Maximum Memory	32 GB DDR4-2400 non-ECC unbuffered SDRAM (Transfer rates up to 2400 MT/s)
Memory Slots	2 SODIMM
Internal Storage	256 GB up to 1 TB ⁵
Available Graphics	Discrete: NVIDIA® Quadro® P5200 (16 GB) ^{7,14} (With Miracast for wireless external display.)
Audio	RealTek ALC3866-CG with integrated DTS Headphone:X®
Networking	LAN: Realtek RTL8153B 10/100/1000 Mbit ⁸ WLAN: Intel® Dual Band Wireless-AC 8265 802.11a/b/g/n/ac (2x2) Wi-Fi and Bluetooth® 4.2 Combo
Expansion Slots	1 M.2 PCIe Gen3 x1 ⁶ (For WLAN/BT M.2 module only)
Ports and Connectors	Top: 1 HMD power port; 2 USB 3.0; 1 HDMI 2.0; 1 mini DisplayPort™ 1.3; 1 Thunderbolt™ (USB Type-C™ connector); 1 headphone/microphone combo Bottom: 1 dock connector; 2 external battery power ports Right side: 2 USB 3.0 Left side: 1 DC-in power connector
Software	HP Performance Advisor; HP Remote Graphics Software (RGS) 7.1; HP Client Security Software; HP Velocity; HP Client Management Software Suite ^{12,13}
Power	330 W up to 92.6% efficiency, active PFC
Dimensions (W x D x H)	13.11 x 9.29 x 2.39 in 33.3 x 23.6 x 6.09 cm
Weight	10.25 lb 4.65 kg
Energy Efficiency Compliance	ENERGY STAR® certified and EPEAT® registered configurations available ¹⁰
Environmental Certification	Low halogen ¹¹
Warranty	1-year (1-1-1) limited warranty and service offering includes 1 year of parts, labor and on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.

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Recommended accessories and services (not included)

HP Z VR Backpack Battery Pack



Sustain extensive and uncompromising VR experiences with the accessible and easy to use HP Z VR Backpack Battery Pack, built for the HP Z VR Backpack PC and HP Z VR Backpack Harness.
Product number: 2HY48AA

HP Z VR Backpack Battery Charger



Keep your HP Z VR Backpack PC batteries¹ charged and ready with the HP Z VR Backpack Battery Charger.
Product number: 2HY51AA

HP Z VR Backpack HTC Vive Cables



Connect your HTC VIVE HMD to your HP Z VR Backpack PC with the HTC VIVE Combo Cable that eliminates the up to 15 feet of HTC VIVE HMD cabling used with traditional PCs.
Product number: 2HY49AA

HP Z VR Backpack G1 Dock



Move seamlessly between the mobile VR experience of your HP Z VR Backpack PC and an expansive, high-powered desktop solution with the HP Z VR Backpack G1 Dock, which lets you charge your Z VR PC and connect to dual 4K displays, accessories, and a wired network.¹
Product number: 2LM71AA

HP 330W Smart AC Power Adapter



Enjoy an integrated and cohesive product ecosystem with an adapter designed to match your HP Z VR Backpack PC.
Product number: 2YD04AA

HP Z VR Backpack Harness



Keeps users comfortable during their VR experience with the lightweight and durable HP Z VR Backpack Harness, designed for the HP Z VR Backpack PC.
Product number: 2HY47AA

HP 3 year Next Business Day Onsite Hardware Support for Notebooks



When hardware issues come up, the sooner you can get running again, the better. Have expertise at the ready with HP Hardware Next Business Day Onsite Service, and vastly improve your product uptime. With high-quality remote assistance or convenient onsite support available the next business day, help is there when you need it—so you can get back to work.
Product number: U4391E

Messaging Footnotes

¹ 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 microsoft.com/windows.

² Based on backpack VR PCs as of July 20, 2017 and power based on processor, graphics and memory.

³ Weight will vary by configuration.

⁴ VR Headset sold separately.

⁵ In accordance with Microsoft's support policy, HP does not support the 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://www.support.hp.com>.

⁶ MIL STD 810G testing is pending and is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Damage under the MIL STD test conditions or any accidental damage requires an optional HP Accidental Damage Protection Care.

Technical Specifications Footnotes

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² 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.

³ Some vPro functionality of this technology, such as Intel® Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependent on 3rd party software providers. Microsoft Windows required.

⁴ In accordance with Microsoft's support policy, HP does not support the 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://www.support.hp.com>.

⁵ For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows 10) of system disk is reserved for system recovery software.

⁶ Choice of one installed in native M.2 slot on HP Z VR Workstation motherboard.

⁷ No CPU Integrated Graphics available. Only Discrete Graphics enabled.

⁸ Ethernet LAN is accessible only when the system is docked.

⁹ Wireless cards are optional or add-on features and requires separately purchased wireless access point and internet service. Availability of public wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications 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 802.11ac WLAN devices.

¹⁰ EPEAT® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country. Search keyword generator on HP's 3rd party option store for solar generator accessories at [HYPERLINK "http://www.hp.com/go/options" www.hp.com/go/options](http://www.hp.com/go/options)

¹¹ External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.

¹² HP Remote Graphics Software requires a Windows, Linux®, or Mac®OS X 10.10 and newer operating system and network access.

¹³ RGS, Velocity, Client Security and Client Management SW are available for download on <http://www.hp.com/go/clientmanagement> www.hp.com/go/clientmanagement

¹⁴ Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming media players that also support Miracast. You can use Miracast to share what you're doing on your PC and present a slide show. For more information: <http://windows.microsoft.com/en-us/windows-8/project-wireless-screen-miracast>.

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4AA7-0460ENUC, January 31st 2018

