



HP Z VR Backpack G1 Workstation

VR this powerful is no toy

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.
- A professional wearable VR PC that fits in a lightweight 10.25 lb/4.6 kg backpack without the need for long cords.
- 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.
- 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®.
- 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.
- The harness is made of durable, easy-fitting mesh designed to keep you comfortable.

HP Z VR Backpack G1 Workstation Specifications Table



Available Operating Systems	Windows 10 Pro 64 – HP recommends Windows 10 Pro for business ¹
Processor family⁴	7th Generation Intel® Core™ i7 processor
Available 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
Form factor	Backpack when worn, compact PC when docked.
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®
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
Communications	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 ^{3,9} ;
Available Software	HP Client Security; HP Performance Advisor; HP Remote Graphics Software ^{12,13}
Power	330 W up to 92.6% efficiency, active PFC
Dimensions	33.3 x 23.6 x 6.09 cm
Weight	4.65 kg (Weight includes Backpack plus the HP Z VR Backpack harness and external. Weight will vary by configuration.)
Energy efficiency compliance	ENERGY STAR® certified and EPEAT® registered configurations available ¹⁰
Environmental specifications	Low halogen ¹¹
What's in the box	HP Z VR Backpack PC; HP Z VR Backpack Harness; HP Z VR Backpack Battery; HP Z VR Backpack Battery Charger; HP Z VR Backpack G1 Dock; HP Z VR Backpack HTC Vive Cables; HP 330W Smart AC Power Adapter; HP 180W Smart AC Power Adapter
Warranty	1 year limited warranty. Batteries have a default one year limited warranty. Optional HP Care Pack Services are extended service contracts which go beyond your standard limited warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at http://www.hp.com/go/cpc . Sold separately or as an optional feature. Service levels and response times for HP Care Packs may vary depending on your geographic location.

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Accessories and services (not included)

**HP 3-year Travel Next
Business Day Low End
Notebook Only Hardware
Support**



This HP services offers notebook users on the go prompt, reliable coverage in major geographies of the world, for 3 years. For more information on Care Pack services, please visit www.hp.com/go/cpc.
Product number: UC909E

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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

- 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 <http://www.windows.com>.
- 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"](http://www.hp.com/go/options) 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>.
- ¹⁵ Battery is internal and not replaceable by customer. Serviceable by warranty.

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