Overview

HP Reverb G2 Omnicept Edition

Introduction

Sensory data. Sensational VR. Introducing a VR headset enabling a new way to live and work. We've paired our innovation HP Reverb G2 design with a state-of-the-art sensor system , so you can capture biometric data in real time and improve training, wellbeing, creation and collaboration. This HMD take it to the next level.

Integrated sensors measure muscle movement, gaze, pupil size and pulse and seamlessly transfers data to the HP Omnicept platform[1]. By capturing user responses in real time, you can generate insights and adapt each user's experience.

[1] VR application compatibility required. 30 day trial of HP Omnicept can be downloaded from the HP Developer Portal (https://developers.hp.com/). Functionality is limited to sensor data after the trial period. To continue full functionality, resale model requires Royalty License; per seat Developer and Runtime License is required for Enterprise and Government customers. Available in select countries. For complete details see hp.com/omnicept.

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Key Features and Benefits

- By monitoring heart rate, pupillometry and/or eye movement, your app can discern the level of brain power a user exerts in a VR session – an indicator of how well someone performs under stress and how effective decisions are made. Now you can uncover actionable insights to adapt each user's experience.[1]
- With eye tracking and pupillometry sensors built into the HMD and integrated with HP Omnicept, get eye tracking data to better understand how a user interacts with a VR experience. [1]
- With integrated eye tracking, this HMD is able to discern the user's gaze direction, enabling a reduction in GPU load and improved image quality within the user's foveal region, enhancing VR realism.[2]
- Immerse yourself in ultra-sharp visuals with mura-free, 2160 x 2160 LCD panels per eye and full RGB stripe.
- With four cameras and internal sensors for position detection, you can now track more of your arm movement. Jump right into virtual reality without additional peripherals.
- With a smaller and more ergonomic design, our controllers are more natural and comfortable to hold onto. Plus, get superb tracking performance with integrated Bluetooth® connection.
- With a ratcheting headband, increased cushion size, flex material and adjustable interpupillary distance (IPD), you get a personalized, more comfortable fit for longer wear.
- Get an immersive experience with HP VR Spatial Audio[3] and industry-leading Valve speakers. They sit off the ear by 10mm, allowing you to have a more comfortable fit.
- Get more clarity over the previous gen with new lenses designed by Valve. And, interpupillary distance (IPD) adjustment allows you to adapt with the width of lenses – so you get a perfect fit.
- Our new and improved 6 meter cable connects directly to the headset and is thinner, lighter and longer than ever, giving you room to move freely.

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[2] NVIDIA VR Ready Quadro or GeForce Turing based GPU required for foveated rendering. For developers, Unity foveated rendering plug-in and run-time are also required and available from the Unity Store or HP Developer Portal https://developers.hp.com/omnicept/downloads

[3] HP Omnicept SDK required for integration of HP VR Spatial Audio. Unity and Unreal Engine plug-in are required, plug-ins provided.

In The Box

- HP Reverb G2 Omnicept Edition
- 6m headset cable for desktop and mobile PC's
- Power adapter
- 2 motion controllers
- 1 DisplayPort to mini-DisplayPort™ adapter
- USB-C® to USB-A adapter
- Setup document
- 1 year limited warranty

Recommended minimum workstation specifications

™Cards that typically run HP Reverb G2 Omnicept Edition at full resolution:
- Consumer
  - NVIDIA® GeForce® GTX 1080, NVIDIA® GeForce® GTX 1080 Ti

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- o NVIDIA® GeForce® RTX 2060 SUPER, NVIDIA® GeForce® RTX 2070, NVIDIA® GeForce® RTX 2070 SUPER, NVIDIA® GeForce® RTX 2080, NVIDIA® GeForce® RTX 2080 SUPER, NVIDIA® GeForce® 2080 Ti
  - o NVIDIA® GeForce® RTX 3070, NVIDIA® GeForce® RTX 3080, NVIDIA® GeForce® RTX 3090
  - o AMD Radeon™ RX 5700, AMD Radeon™ RX 5700 XT, AMD Radeon™ RX 6800 XT, AMD Radeon™ RX 6900 XT, AMD Radeon™ 7
- Workstation
  - o NVIDIA® Quadro® P5200
  - o NVIDIA® Quadro® RTX 4000, NVIDIA® Quadro® RTX 5000, NVIDIA® Quadro® RTX 6000, NVIDIA® Quadro® RTX 8000
  - o NVIDIA RTX™ A4000, NVIDIA RTX™ A5000, NVIDIA RTX™ A6000
  - o AMD Radeon™ Pro WX 8200, AMD Radeon™ Pro WX 9200, AMD Radeon™ Pro WX 9100
  - o AMD Radeon™ Pro W5700

Cards that typically run HP Reverb G2 Omnicept Edition at half resolution:
- Consumer
  - o NVIDIA® GeForce® GTX 1060, NVIDIA® GeForce® GTX 1660, NVIDIA® GeForce® GTX 1660ti, NVIDIA® GeForce® GTX 1070
  - o NVIDIA® GeForce® RTX 2060
  - o AMD Radeon™ RX 580, AMD Radeon™ RX 5500XT, AMD Radeon™ RX 590, AMD Radeon™ RX 5600 XT, AMD Radeon™ RX Vega^{56}, AMD Radeon™ RX Vega^{64}
- Workstation
  - o NVIDIA® Quadro® P3200, NVIDIA® Quadro® P4000, NVIDIA® Quadro® P4200, NVIDIA® Quadro® P5000
  - o NVIDIA® Quadro® RTX 3000
  - o AMD Radeon™ Pro WX 7100

Processor: Intel® Core™ i5, i7, Intel® Xeon® E3-1240 v5, equivalent or better. AMD Ryzen 5 equivalent or better
Memory: 8 GB RAM or more
Video out: DisplayPort™ 1.3
USB ports: 1x USB 3.0 Type C
Power: USB Type-C® with power delivery or included power adapter
Operating system: Windows 10 May 2019 update or later

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Available Localizations

HP Reverb G2 Omnicept Edition   3A7X9AA

Service and Support

1 year standard limited warranty. Optional Care Packs are available to extend your protection beyond the standard limited warranty. For details, visit http://www.hp.com/go/cpc.

Technical Specifications

HP Reverb G2 Omnicept Edition

Screen:	Dual LCD 2.89'' diagonal with Pulse Backlight technology
Resolution:	2160 x 2160 pixels per eye (4320 x 2160 pixels combined). RGB sub-pixels
Refresh rate:	90 Hz with recommended system specs
Field of view:	~114 degrees, Fresnel-Aspherical
Tracking:	2 front-facing cameras and 2 side-facing cameras
Sensors:	Windows Mixed Reality inside/out 6 DOF motion tracking, gyroscope, accelerometer, and magnetometer Eye Tracking with pupillometry, heart rate, face camera
Eye adjustments:	64mm +/- 4mm by hardware slider
Connections:	DisplayPort™ 1.3, USB 3.0 type C, power adapter
Cables:	One 6m 2-in-1 (DisplayPort™ 1.3 + USB 3.0 type C) cable, and one power adapter (for use when USB-C does not have power delivery). Mini DisplayPort™ to Full size DisplayPort™ adapter
Mechanical ID:	Replaceable face cushions
Dimensions (without straps):	11 x 25.3 x 29 cm
Weight :	1.6 lbs 727 g

Technical Specifications

HP Reverb G2 Omnicept Edition Controllers

Sensors:	Windows Mixed Reality tracking, IMU, active LEDs
Connections:	Bluetooth®
Inputs:	A/B or X/Y buttons, Menu button, Windows Start button, Grip trigger, Thumbstick, Trigger
Power:	Two AA batteries for each controller (included)
Dimensions (WxDxH)	2.6x5x4.7in（66x129x119mm）
Weight (w/o cable)	0.37lbs (167g)

Tracked area requirements

Standing / seated:	No minimum space requirements

Summary of Changes

Date of change:	Version History:		Description of change:
December 11, 2020	From v1 to v2	Changed	Options and Accessories section
December 20, 2021	From v2 to v3	Removed	Options and Accessories section
		Changed	Recommended minimum workstation specifications section
March 26, 2021	From v3 to v4	Changed	Recommended minimum workstation specifications section
April 7, 2021	From v4 to v5	Changed	Introduction, Key Features and Benefits, Recommended minimum workstation specifications sections
April 28, 2021	From v5 to v6	Changed	In The Box section
May 11, 2021	From v6 to v7	Changed	Recommended minimum workstation specifications section