Microsoft HoloLens

Microsoft HoloLens

Microsoft HoloLens is the first fully self-contained holographic computer running Windows 10. It is completely untethered–no wires, phones, or connection to a PC needed. Microsoft HoloLens allows you to place holograms in your physical environment providing a heads-up, hands-free way to see your world.

HoloLens Device Specifications

Software	Windows 10 Windows Mixed Reality
Weight	579g (1.28 lbs.)
Optics / Display	2.3 megapixel widescreen see-through holographic lenses (waveguides) 2 HD 16:9 light engines (screen aspect ratio) Holographic Density: >2.5k radiant (light points per radian) 1 2.4-megapixel photographic video camera Automatic pupillary distance calibration
Sensors	1 IMU (Accelerometer, gyroscope, and magnetometer) 4 environment sensors 1 energy-efficient depth camera with a 120°x120° angle of view Four-microphone array 1 ambient light sensor
Processors	Intel 32-bit (1GHz) with TPM 2.0 support Custom-built Microsoft Holographic Processing Unit (HPU 1.0)
Memory	2GB RAM
Storage	64GB (flash memory)
Power	Battery Life 2-3 hours of active use Up to 2 weeks on standby mode Fully functional when charging Passively cooled (no fans) Battery status LED nodes (battery level and power/standby mode settings)
Security	Windows 10 software updates Additional security and device management available for Commercial Suite

Wireless	Wi-Fi 802.11ac wireless networking Bluetooth 4.1 Low Energy (LE) wireless connectivity
Audio	3D audio speakers 3.5mm audio jack
Ports	Micro USB 2.0
Physical Buttons	Power Volume up/down Brightness up/down
What's in the box	HoloLens Development Edition Clicker Carrying case Charger and cable Microfiber cloth Nose pads Overhead strap
OS and Apps	Windows 10 Calibration Holograms Learn Gestures Settings Windows Feedback Windows Store Microsoft Edge Photos
Hardware / Software Requirements	Windows 10 PC Visual Studio 2015 Unity

Microsoft HoloLens

Human understanding capabilities

The holograms you'll see with Microsoft HoloLens can appear lifelike, and can move, be shaped, and change according to interaction with you or the physical environment in which they are visible. Interact with holograms using the navigation commands below:

Spatial sound	Allows the user to hear binaural audio which can simulate spatial effects, meaning the user, virtually can perceive, and locate a sound, as though it is coming from a virtual pinpoint or location. Learn more: https://www.youtube.com/watch?v=aB3TDjYklmo
Gaze tracking	Allows the user to bring application focus to whatever the user is perceiving to navigate and explore, the technology can tell exactly what and where to show the images for each pupil to generate stereoscopic 3D illusions. Learn more: https://www.youtube.com/watch?v=zCPiZlWdVws
Gesture input	Allows the user to use the "bloom" gesture to pull up a UI navigation menu screen (similar to a Windows key on a Windows keyboard, this is your "home" button) Use the air tap gesture to select menu commands (similar to clicking an imaginary computer mouse) Learn more: https://www.youtube.com/watch?v=kwn9Lh0E_vU
Voice support	Allows the user to use voice commands (similar to asking Cortana, Siri, Google a question) Allows developers to use the Text to Speech capability (i.e. speech recognition) to create voice inputs for apps they are creating in Unity. Learn more: https://www.youtube.com/watch?v=eHMkOpNUtR8

	Commercial Suite	Development Edition
HoloLens device and clicker	Included	Included
App dev support: forums/community	Included	Included
1 year OEM warranty	Included	-
Enterprise features		-
Kiosk mode	Included	-
Mobile Device Management	Included	-
Identity with PIN unlock	Included	-
Windows Update for Business	Included	-
Data security	Included	-
Work/remote access	Included	-
Windows Store for Business	Included	-