



# Microsoft HoloLens 2 with Mixed Reality applications

[Microsoft HoloLens 2](#) is an untethered, self-contained holographic device that allows users to leverage enterprise-ready mixed reality (MR) solutions while working heads-up and hands-free. By merging the real world with the digital world, MR users across industries can benefit from enriched remote collaboration, increased precision of work, minimized human error, fewer resource gaps, better knowledge retention, and more. Pair HoloLens 2 with a comprehensive ecosystem of apps and services from Microsoft and third-party partners for maximum ROI and productivity impact.

## Extend [HoloLens 2 capabilities](#) with mixed reality apps and services

Enhance visibility and deepen understanding of complex content



Mixed Reality Services can help users interact with holographic content to understand how complex objects and systems operate in physical spaces. Consider introducing powerful capabilities to HoloLens 2 like [Azure Remote Rendering](#) (ARR) where users can render existing, complex content in high-quality 3D in real-time.

[Discover MR Services >](#)

Offer hands-free instruction that's intuitive and reliable



Dynamics 365 Guides is an app that enables you to create interactive step-by-step instructions for complex tasks. You can also connect with remote experts through Microsoft Teams to train faster, reduce errors, and improve productivity. By overlaying powerful, step-by-step instructions on physical equipment, companies can blend physical and digital realities to reduce waste, human error, and production downtime.

[Explore Guides >](#)

Fix problems faster with access to expertise from anywhere



Dynamics 365 Remote Assist is a tool that enables you to share your real-time view with remote experts, communicate detailed and complex guidance visually, and collaborate with remote colleagues in real time. You can invite them to see what you see with Teams calling, annotate equipment with holograms to enhance communication, and ultimately accelerate first-time fix rates.

[Explore Remote Assist >](#)

Looking for more mixed reality business scenarios? Explore other third-party mixed reality apps from Microsoft partners to cover even more industry-specific use cases from medical to mechanical. [Find a Mixed Reality partner.](#)



# Technical overview

## HoloLens 2

### Features

#### Interactive and accessible

Touch, grasp, and move holograms with your hands or use your gaze to direct focus. Operate hands-free with built-in voice commands.

#### World-anchoring (spatial mapping)

Digital content stays in place, anchored to objects or surfaces in your physical environment.

#### OS updates

Keep secure with monthly servicing updates and take advantage of new productivity and manageability capabilities in bi-annual releases.

#### Windows Hello for Business

Seamlessly and securely log in to the device with iris-based authentication.

#### Ergonomic

The device is lightweight and includes a dial-in fit system to support extended use.

#### Remotely manage devices

Remotely manage multiple HoloLens 2 devices simultaneously using solutions like Microsoft Intune, VMware Workspace One, MobileIron, and more.

#### Mixed Reality Capture

Document an experience as a photo or a video to share with others in real time.

#### Azure-powered

Render real-time high-fidelity 3D content in Azure and stream seamlessly to HoloLens 2. Content can be anchored to a location or object that persists across users with Azure mixed reality services.

#### Expansive app ecosystem

Deliver ROI with HoloLens 2 right out of the box with Dynamics 365 Guides and Dynamics 365 Remote Assist. Explore other industry-specific use cases from our 200+ Microsoft Mixed Reality Partners.



# Technical specifications

## HoloLens 2

Display	Optics	See-through holographic lenses (waveguides)	Environment understanding	6DoF tracking	World-scale positional tracking
	Resolution	2k 3:2 light engines		Spatial Mapping	Real-time environment mesh
	Holographic density	>2.5k radiants (light points per radian)		Mixed Reality Capture	Mixed hologram and physical environment photos and video
	Eye-based rendering	Display optimization for 3D eye position			
Sensors	Hand tracking	4 visible light cameras	Compute and connectivity	SoC	Qualcomm Snapdragon 850 Compute Platform
	Eye tracking	2 IR cameras		HPU	Second-generation custom-built holographic processing unit
	Depth	1-MP time-of-flight (ToF) depth sensor		Memory	4-GB LPDDR4x system DRAM
	IMU	Accelerometer, gyroscope, magnetometer		Storage	64-GB UFS 2.1
	Camera	8-MP stills, 1080p30 video		Wi-Fi	Wi-Fi: Wi-Fi 5 (802.11ac 2x2)
Audio and Speech	Microphone array	5 channels		Bluetooth	5
	Speakers	Built-in spatial sound		USB	USB Type-C
Human understanding	Hand tracking	Two-handed fully articulated model, direct manipulation		Software	Windows Holographic Operating System
	Eye tracking	Real-time tracking			Microsoft Edge
	Voice	Command and control on-device; natural language with internet connectivity			Dynamics 365 Remote Assist ( <a href="#">See technical overview</a> )
	Windows Hello	Enterprise-grade security with iris recognition	Dynamics 365 Guides ( <a href="#">See technical overview</a> )		
		Azure Remote Rendering ( <a href="#">Learn more</a> )			
Fit	Single size	Yes	3D Viewer		
	Fits over glasses	Yes	Power	Battery life	2-3 hours of active use
	Weight	566g		Charging	USB-PD for fast charging
		Cooling		Passive (no fans)	
			Contains lithium batteries	( <a href="#">See more information</a> )	

### Disclaimers:

1. Microsoft mixed reality software, like Dynamics 365 Guides and Dynamics 365 Remote Assist, as well as Azure services like Azure Remote Rendering are sold separately.
2. HoloLens 2 is a general compute device. Except for units expressly marked by Microsoft, HoloLens is not intended to be integrated into machinery, used as a regulated medical device, or used in hazardous or specialized locations. Any changes or modifications not expressly approved by Microsoft could void the user's authority to operate this device.
3. HoloLens 2 is designed for use with NRTL Listed (UL, CSA, ETL, etc.), and/or IEC/EN 60950-1 or IEC/EN 62368-1 compliant (CE marked) Information Technology equipment.
4. HoloLens 2 is designed for use between +10 C and +35 C.
5. No user serviceable parts are included when purchasing HoloLens 2. The battery pack in HoloLens 2 is not replaceable.

[Learn more >](#)

[HoloLens 2 Capabilities and Solutions >](#)

[Customer Success Stories >](#)

[Read the TEI Study >](#)

