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Leap Motion Controller 2

Introducing the Leap Motion Controller 2, powered by Ultraleap Hyperion.

The Leap Motion Controller 2 is the best camera for using Ultraleap Hyperion for hand tracking or as a computer vision platform. By tracking hands, this camera enables touchless 3D interaction, making it possible to replace a computer mouse or retrofit a touchscreen. Alternatively, it can be used for a number of CV applications, such as depth sensing or 3D scanning.

The controller is capable of tracking hands within a 3D interactive zone at distances of up to 110 cm (43") and across a 160° x 160° maximum field of view. When combined with Ultraleap Hyperion, the Leap Motion Controller 2 is able to discern 27 distinct hand elements, including bones and joints, and visualise them, even when they are obscured by other parts of the hand or objects. Additionally, the camera firmware is developed in-house which means the camera can be used in a number of unique ways for computer vision (CV) applications.

Easy To Integrate and Use

The Leap Motion Controller 2 includes access to Ultraleap Hyperion features and game engine plugins, which makes it easy to add hand tracking into an application.

World Class Hand Tracking Solution

An optical hand tracking camera that captures 3D images of users' hands, including 27 individual joints, and so they can interact with digital content.

Flexible Camera

One of the best cameras on the market for customers looking to achieve high IR sensitivity at fast framerates, making it perfect for computer vision use cases.

What's included with the Leap Motion Controller 2?

- Leap Motion Controller 2: The second generation of Ultraleap's iconic hand tracking camera provides a greater field of view, runs at lower power, and is a much smaller form factor.
- 1.5 m, USB C-> USB C cable: extended length to allow for connecting the Leap Motion Controller 2 to a PC or robot, without worrying how far the camera is from the machine it is connected to.
- Ultraleap Hyperion: Hyperion provides the most advanced version of Ultraleap's award-winning hand tracking software. It also provides APIs that unlock the Leap Motion Controller 2 camera for expanded computer vision use cases such as depth sensing or 3D scanning.
- Game Engine Plugins: Plugins for Unity and Unreal, the two leading application development platforms, so that developers can incorporate hand tracking into their established workflow.
- A license for enterprise use: Included with the purchase of each camera is a limited non-exclusive licence to install and use Ultraleap Hyperion for commercial purposes.

Example Uses

- Tethered PCVR
- Computer vision: marker tracking, telepresence, robotics controls & AI-assisted teaching
- Location-based experiences: interactive entertainment at arcades and amusement parks.
- Mouse or touchscreen replacement

Specifications

Power supply requirement:	5VDC via USB, 500 mA		
Data connection:	USB 3.0 via USB type C connector		
Tracking range and field of view:	Depth between 10 cm (4") to 110 cm (43")*		
Maximum field of view:	160° x 160° field of view*		
Sensors	OmniVision OG01A1B. UVC 1.1 compliant.**		
Resolution	1024 x 1024 @88fps, USB3 and 512 x 512 @120fps, USB3 (binned at 2x2 on sensor to improve noise).		
Camera framerate:	120 fps maximum		
Operating wavelength:	850 nm		
Construction:	Aluminium and scratch-resistant glass		
Operating temperature:	0°C to 40°C (32°F to 104°F)		
Storage temperature:	-30°C to 60°C (-22°F to 140°)		
Compliance:	CE, FCC, UKCA, KC, PSE, RCM A-NZ, RoHS, REACH		
Compatible operating systems:	Windows, Android, macOS		
System requirements:	Windows [®] 10+, 64-bit, Intel [®] i7 processor***, 5th Gen (supports AVX instructions); Android Headset with Qualcomm [®] Snapdragon XR2 processor; USB C, USB 3.0 connector; macOS version 11.0+, supported processors: Intel [®] i7 processor, Apple m1, m2		
Dimensions:	84 mm x 20 mm x 12 mm		
Weight:	29 g		

Specifications are current at time of publishing and subject to change.

* Range and field of view measured under controlled test conditions. Performance may vary based on a number of factors including environment, hand position, camera position.

** Tracking can run on older processors but with decreased tracking performance.

Device dimensions



All dimensions in mm



Where to buy it

The Leap Motion Controller 2 is available to purchase from different distributors, including Amazon. Distributors vary according to region.

The Ultraleap Hyperion tracking software is subject to the terms of the enterprise licence agreement available <u>here</u>. By using the Ultraleap Leap Motion Controller 2 and associated Ultraleap Hyperion tracking software you agree to the terms of this licence.

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