



# 3Di

## Stereo Hand Tracking Camera

The Ultraleap 3Di Stereo Hand Tracking Camera is designed to be connected to an interactive screen. Together with Ultraleap's world-leading software, it transforms displays into touchless, three-dimensional, immersive surfaces.

Ultraleap 3Di allows easy integration of Ultraleap hand tracking in a form factor ruggedized for use in permanent settings – such as self-serve kiosks, digital out-of-home installations, interactive displays in retail, museums, and theme parks, or medical/industrial uses.



Front of Ultraleap 3Di.

### Ultraleap TouchFree

Ultraleap 3Di is part of Ultraleap's TouchFree end-to-end solution – camera hardware, reliable hand tracking software, and developer tooling.

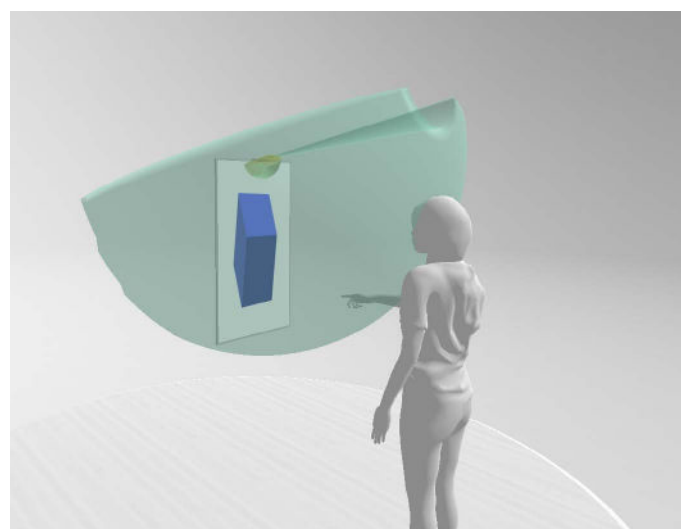
The camera uses Ultraleap's patented stereo infrared technology and world-leading Gemini hand tracking software. It is robust even in challenging lighting conditions, and reliably tracks a wide variety of hand sizes and shapes.

Ultraleap also provides a suite of developer tools for development of touchless experiences:

- **TouchFree Application:**  
Detects a user's hand in mid-air and converts it to an on-screen cursor. Retrofit existing touchscreen interfaces with touchless gesture control or evaluate using your desktop monitor.
- **TouchFree Tooling for Web or Unity:**  
Add touchless cursor control into kiosk applications in minutes, and have total control over how your application reacts to users' hand movements.



Reverse of Ultraleap 3Di.



Simulation of Ultraleap 3Di tracking range when connected above a 42" screen.

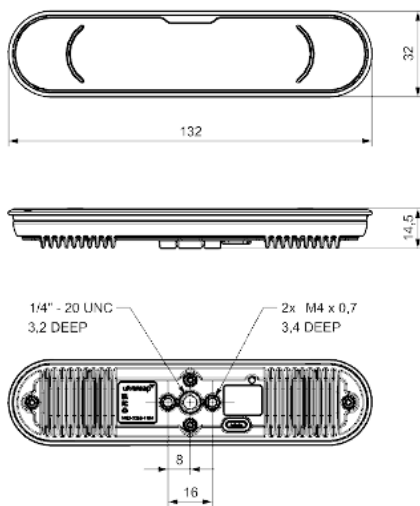
# Specifications

Power:	5 VDC via USB connector 500 mA max 250 mA typical
Data connection:	USB 2.0 via micro USB type-B connector
Tracking range and field of view:	Depth of between 10 cm (4") to 75 cm (29.5") preferred, up to 1 m (39") maximum; 170°x170° typical field of view (160°x160° minimum). Ultraleap 3Di can provide touchscreen emulation for screens up to 42" (portrait or landscape). Larger screens can also be controlled through interaction at a distance.
Camera framerate:	90 fps
Operating wavelength:	850 nm. Provides its own illumination via two IR LEDs spaced on either side of the cameras.
Temperature rating:	0°C to 40°C (32°F to 104°F)
Ingress protection:	IP54 when mounted using Panel Mount Kit (available from Ultraleap)
Certification:	UKCA, CE, FCC
Minimum system requirements:	Windows® 10, 64-bit, Intel® Core™ i3 processor 5th Gen (must support AVX instructions), 2 GB RAM, USB 2.0 port. <i>Note: Ultraleap 3Di is currently Windows compatible only.</i>
Software:	Downloadable from <a href="https://www.developer.ultraleap.com/touchfree">https://www.developer.ultraleap.com/touchfree</a>

Ultraleap reserves the right to update or modify this specification without notice.

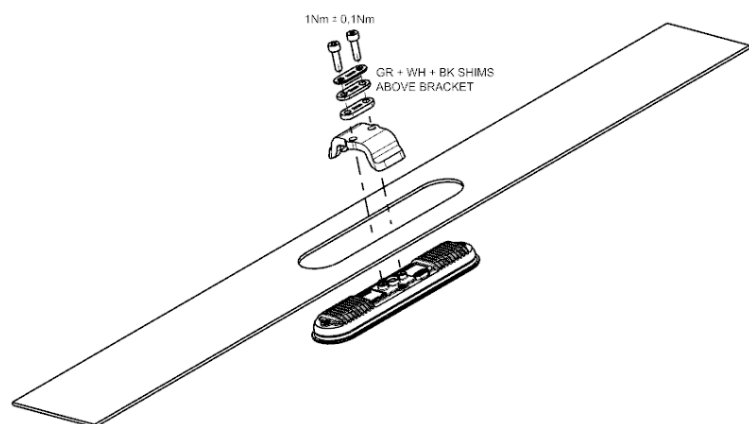
## Device dimensions

All dimensions in mm



## Mounting

Ultraleap 3Di is designed to be integrated directly into permanent installations. A Panel Mount Kit (available from Ultraleap) enables the camera to be securely mounted in a cutout of panels of thickness 2–8 mm.



Example 2 mm panel installation using Panel Mount Kit

Detailed guidelines on camera placement, further mounting options, TouchFree software setup and designing for touchless experiences can be found on <https://docs.ultraleap.com/touchfree-user-manual/>.