

# Fingertracking2 (Tactile)



## Our lightweight solution for hand-tracking

The Fingertracking2 devices are add-ons to the ART tracking system to track both hands as well as the position of the fingers. It works for up to 2 persons / 4 hands and it is available as a 3-finger and 5-finger version. The synchronization and communication to the Controller is wireless. On top the Fingertracking2 Tactile device (3-finger version only) allows the user to sense collisions with virtual objects, having the VR World at your fingertips!

## Technical Data

Features	
Synchronization	via modulated IR flash (from tracking cameras)
Battery <sup>1</sup>	2 x AAA NiMH batteries (1.2 - 1.5 V, typ. 900 mAh)
Continuous operation with tactile feedback <sup>1,2*</sup>	typ. 6 hours
Continuous operation no tactile feedback <sup>1,3</sup>	typ. 9 hours
Continuous operation no tactile feedback <sup>1,4</sup>	typ. 12 hours
Performance	
Frame rate (hand target)	depends on camera system, up to 300Hz
Frame rate (thimbles, 3-finger version)	up to 100 Hz with hand target @ 300 Hz
Frame rate (thimbles, 5-finger version)**	up to 60 Hz with hand target @ 300 Hz
Tracking range	typ. 4 - 5 m (depending on focal length of the cameras and LED brightness)
Radio module*	
Type ID	IEEE 802.15.4
Frequency	2.4 GHz, 8 selectable channels
Transmission power	3 dBm (2.0 mW)
Operating conditions	
Operating temperatures	5 - 40°C
Relative humidity	5 - 85% (non-condensing)
Dimensions	
Hand target	approx. 72 x 77 x 21 mm
Thimble set	available in 4 different sizes (extra-small, small, medium, large)
Weight Handset	approx. 55 g (without batteries)
Weight Thimbles	approx. 10 g (non-tactile 3-finger version) / 15 g (tactile version)
Size of vibro motor*	2.15 x 8 mm precision microdrive at each finger thimble
Battery Charger	
Input	AC 100 - 240 V, 50/60 Hz, 0.25 A or DC 9 - 12 V, 1 A
Charging time <sup>1</sup>	Approx. 2 hours
Weight (without batteries)	Approx. 0.2 kg

<sup>1</sup> valid for new batteries

<sup>2</sup> 150 Hz tracking frequency, LED brightness high, 2 vibrations per 5 seconds (vibrations 1 second in duration)

<sup>3</sup> 150 Hz tracking frequency, LED brightness high

<sup>4</sup> 150 Hz tracking frequency, LED brightness low

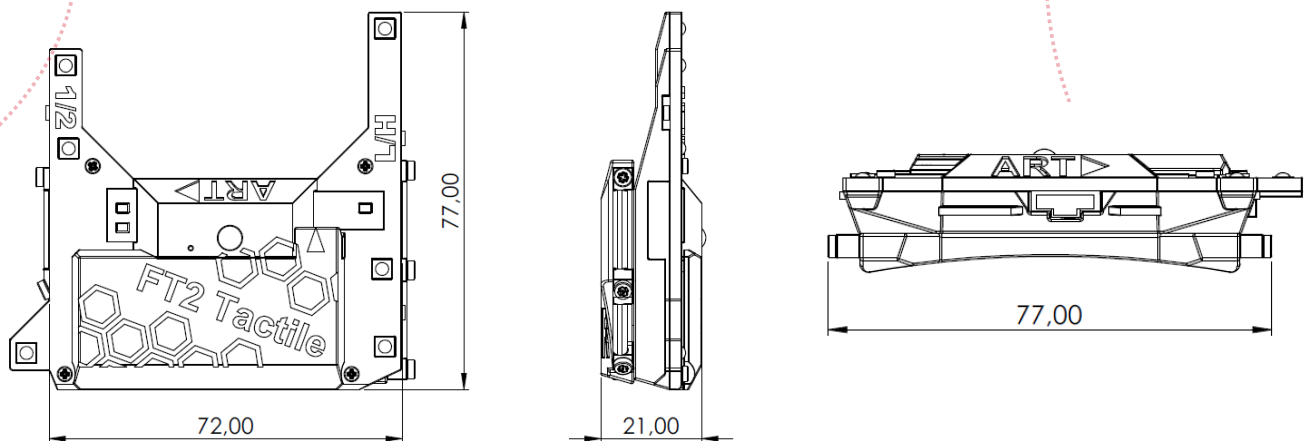
\* applicable for tactile version

\*\* not applicable for tactile version

## Technical Drawing

all dimensions in [mm] unless otherwise specified

### Hand target (both versions):



### Finger thimbles (both versions):

