

# Allegro Hand

## A Low-cost & Highly Adaptive Robotic Hand

with four fingers and sixteen independent torque-controlled joints, it's the perfect platform for grasp and manipulation research and education.



**Allegro Hand V.4**  
by Wonik Robotics

## FEATURES

- # Light weight and portable anthropomorphic design
- # Low-cost dexterous manipulation with applications in research and industry
- # Multiple ready-to-use grasping algorithms capable of handling a variety of object geometries
- # Capable of holding up to 5 kg
- # 16 independent torque-controlled joints (4 fingers x 4)
- # Allegro Hand Console Application for simulation-based algorithm prototyping and hardware testing
- # Support for real-time control and online simulation

## Specifications

<b>Number of Fingers</b>	Four (4) fingers including a thumb
<b>Degrees of Freedom</b>	4 fingers x 4 = 16
<b>Actuation</b>	Type DC Motor
	Gear Ratio 1:369
	Max. Torque 0.70 Nm
	Max. Joint Speed 0.11sec/60degree
<b>Mass</b>	Finger 0.17 kg
	Thumb 0.19 kg
	Total 1.08 kg
<b>Joint Resolution</b>	Measurement Potentiometer
	Resolution(Nominal) 0.002 deg
<b>Communication</b>	Type CAN
	Frequency 333 Hz
<b>Payload</b>	5kg
<b>Power Requirement</b>	12~24V, 120W

## Purchase Options

### Included

- Allegro Hand (left or right)
- Allegro Hand Console Application(linux/Windows) Download Instructions
- Allegro Hand Console Application(linux/Windows) Single-user license
- AllegroHand stand
- CAN/Power cable \*terminated at hand-end only
- 2mm hex wrench
- Spare screws and wire terminals
- Hard plastic case
- Power supply

\* A CAN Interface is not included with the Allegro Hand.



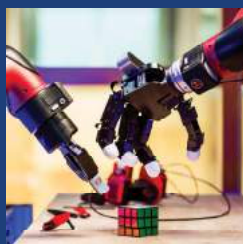
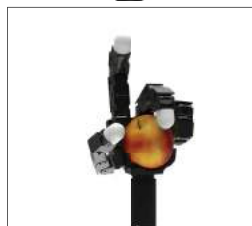
## System Requirement

<b>CPU</b>	Intel Core™2 Duo or higher
<b>RAM</b>	2GB or more
<b>HDD</b>	2GB or more
<b>Graphics</b>	OpenGL 3.0 HW Acceleration enabled
	64Mb of videos RAM or higher
<b>OS</b>	MS Windows XP, 7 & 8, Linux (ROS)
<b>CAN Interface</b>	NI / Peak* * Any CAN interface can be user-configured for use with the AllegroHand.
<b>Other Software</b>	Windows: Visual Studio *optional

FIND MORE at OUR WIKI

wiki.wonikrobotics.com /AllegroHandWiki

- # Technical Support
- # Applications
- # Downloads
- # User Forum



### Facebook

Facebook's robotic institute AI with robot machines



### EPFL

Ultra-fast robotic hand catching the object on the fly



### UPC

Grasping bulky objects with two anthropomorphic hands

## Cooperation with CLIENTS WORLD WIDE

Allegro Hand have worked with various research institutes and corporations.

Stanford



Google

