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.

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

| Number of Fingers | Four (4) fingers including a thumb |
| Degrees of Freedom | 4 fingers x 4 = 16 |
| Actuation | |

| Type | DC Motor |
| Gear Ratio | 1:369 |
| Max. Torque | 0.70 Nm |
| Max. Joint Speed | 0.11sec/60degree |
| Finger | 0.17 kg |
| Thumb | 0.19 kg |
| Total | 1.08 kg |
| Joint Resolution | |
| Measurement | Potentiometer |
| Resolution(Nominal) | 0.002 deg |
| Communication | |
| Type | CAN |
| Frequency | 333 Hz |
| Payload | |
| 5kg |
| Power Requirement | 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

CPU
- Intel Core™2 Duo or higher

RAM
- 2GB or more

HDD
- 2GB or more

Graphics
- OpenGL 3.0 HW Acceleration enabled
- 64Mb of videos RAM or higher

OS
- MS Windows XP, 7 & 8, Linux (ROS)

CAN Interface
- NI / Peak*
  * Any CAN interface can be user-configured for use with the AllegroHand.

Other Software
- Windows: Visual Studio *optional

- Allegro Hand have worked with various research institutes and corporations:
  - Facebook's robotic institute AI with robot machines
  - Ultra-fast robotic hand catching the object on the fly
  - Grasping bulky objects with two anthropomorphic hands

Cooperation with CLIENTS WORLD WIDE