

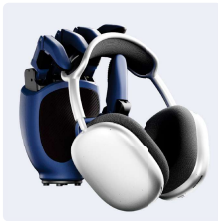
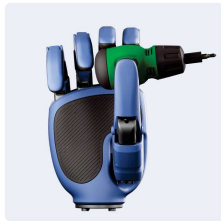
Linker Hand O6

• 6 Active + 5 Passive DOF

• Linkage Drive

Linker Hand O6 is a high-precision bionic dexterous hand launched by Linker Hand to address the market's urgent demand for **cost-effective** solutions.

Featuring 6 active joints + 5 passive joints, it delivers **strong gripping force**, **high-precision force control**, **compact size**, and **light weight**—ideal for **logistics handling**, **industrial assembly**, and **irregular object grasping**.



Key Features

Strong Gripping Force

Equipped with self-developed high-torque servo motor modules and worm gear drive structure, it ensures high rigidity while achieving greater gripping force with high drive efficiency.

High-Precision Control

Adopts a high-precision servo rigid linkage transmission system, self-developed high-precision joint modules, and optimized force-position hybrid control algorithm, enabling $\pm 0.2\text{mm}$ repeat positioning accuracy for reliable, precise movements.

Edge-Cloud Integration

Uses innovative materials for ultra-lightweight design (only 370g). The servo motor module integrates drive and control functions, resulting in a compact structure that matches human hand size—supporting flexible operations and easy compatibility with collaborative robotic arms, service robots, and other systems to boost integration flexibility and motion efficiency.



Piezoresistive Sensors
(Optional)



Capacitive Sensors
(Optional)



Vision
(Optional)



Visual-Tactile Perception
(Optional)

Communication Methods

CAN Interface

Utilizes a proprietary protocol; baud rate is 1Mbps; default device IDs: left hand 0x28, right hand 0x27; supports broadcast ID 0xFF (for addressing, identification, and debugging).

RS485 Interface

Adopts the Modbus protocol; baud rate is 115200bps; default device IDs: left hand 0x28, right hand 0x27; supports function codes: 03/04/06/16; UART settings are fixed: 8 data bits, 1 stop bit, no parity.



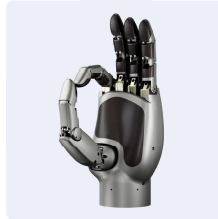
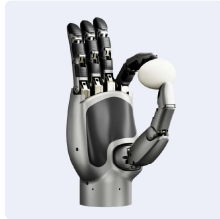
Linker Hand O7

• 7 Active + 10 Passive DOF

• Linkage Drive

Linker Hand O7 is a high-performance dexterous hand with 17 DoFs. Powered by **self-developed motors**, it balances cost control with reliable grasping and operation performance, meeting diverse application needs.

It provides ROS plugins for secondary development, suitable for **education** & **research**, **auxiliary grasping**, and **intelligent interaction**—offering an efficient, economical dexterous hand solution for robotic systems.



Key Features

Human-Like Configuration & Multi-DoF

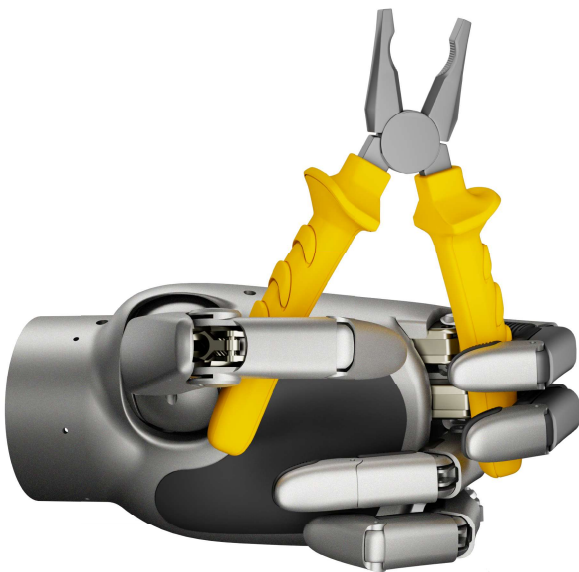
Highly mimics the human hand structure, enabling precise simulation of various grasping and operation postures to adapt to complex task scenarios.

Self-Locking & High-Torque Transmission

Self-developed worm gear drive system delivers strong high-torque output and self-locking function, ensuring precise control and power-off holding for enhanced safety.

Edge-Cloud Integration & One-Click Deployment

Innovative edge-cloud architecture leverages cloud skill libraries, allowing quick deployment of operation skills without coding—lowering usage thresholds and development difficulty.



Piezoresistive Sensors
(Standard)



Capacitive Sensors
(Optional)



Vision
(Optional)



Visual-Tactile Perception
(Optional)

Communication Methods

CAN Interface

Utilizes a proprietary protocol; baud rate is 1Mbps; default device IDs: left hand 0x28, right hand 0x27; supports broadcast ID 0xFF (for addressing, identification, and debugging).

RS485 Interface

Adopts the Modbus protocol; baud rate is 115200bps; default device IDs: left hand 0x28, right hand 0x27; supports function codes: 03/04/06/16; UART settings are fixed: 8 data bits, 1 stop bit, no parity.



Linker Hand

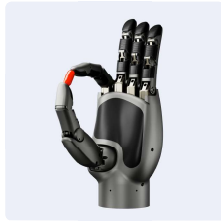
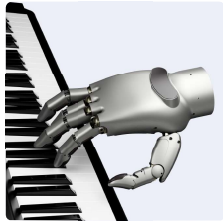
Linker Hand L10

• 10 Active + 10 Passive DOF

• Linkage Drive

Linker Hand L10 is a high-performance dexterous hand with 20 DoFs. Equipped with **self-developed motors** and **linkage transmission mechanisms**, it ensures traction stability while enabling precise control and smooth movement.

Widely used in **education** & **research**, **piano performance**, **household assistance**, and **elderly care**, it drives the advancement and implementation of intelligent robots and human-robot collaboration. It supports **multi-modal environmental perception** via various sensors and is compatible with ROS/QT environments (with standard ROS plugins for secondary development).



Key Features

Highly Bionic Multi-DoF Design

20 DoFs (10 active + 10 passive) enable accurate simulation of human hand movements and fine operations, supporting adaptive object grasping and complex tasks.

Multi-Modal Perception & Intelligent Interaction

Configurable with cameras, electronic skin, and other sensors to build a full-range "vision + touch" perception model—enhancing environment understanding and interaction capabilities for unstructured scenarios.

Edge-Cloud Integration & No-Code Deployment

Leverages edge-cloud architecture for one-click skill deployment from cloud libraries, reducing usage barriers and improving development efficiency.

High-Reliability Structure & Data Support

Self-developed motor and linkage system resists impact and damage, adapting to high-intensity scenarios like embodied intelligence training. It supports efficient data collection for data farm construction and algorithm optimization.



Piezoresistive Sensors
(Standard)



Capacitive Sensors
(Optional)



Vision
(Optional)



Visual-Tactile Perception
(Optional)

Communication Methods

CAN Interface

Utilizes a proprietary protocol; baud rate is 1Mbps; default device IDs: left hand 0x28, right hand 0x27; supports broadcast ID 0xFF (for addressing, identification, and debugging).

RS485 Interface

Adopts the Modbus protocol; baud rate is 115200bps; default device IDs: left hand 0x28, right hand 0x27; supports function codes: 03/04/06/16; UART settings are fixed: 8 data bits, 1 stop bit, no parity.



Linker Hand L20

• 16 Active + 5 Passive DOF

• Linkage Drive

Linker Hand L20 is a 21-DoF dexterous hand that **accurately simulates natural human hand grasping** with delicate operations. It adopts innovative **linkage transmission** and **self-developed motors** for high-precision movement, and supports **force**, **vision**, and **tactile sensors**—enhancing environmental adaptability and intelligent interaction via **multi-modal perception**.

With high DoFs, multi-modal perception, and force-position hybrid algorithms, it is widely used in **education & research**, **industrial automation**, **household assistance**, and elderly care—providing precise, dexterous operation solutions.



Key Features

Highly Bionic DoFs & Fine Operations

21 DoFs (16 active + 5 passive) mimic human hand movements and grasping to meet complex, fine operation requirements.

Multi-Modal Perception & Intelligent Interaction

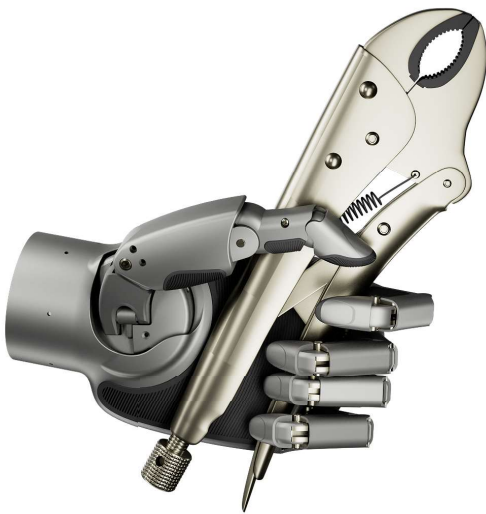
Configurable with force and electronic skin sensors to accurately detect contact force, object shape, and close-range images—boosting environmental adaptability and interaction intelligence.

Edge-Cloud Integration & No-Code Deployment

One-click skill deployment from cloud libraries via edge-cloud architecture, lowering thresholds and improving efficiency.

High Reliability & Data Support

Robust structure resists impact, adapting to high-intensity training and industrial scenarios. It supports self-developed data collection for data farm construction and algorithm optimization.



Piezoresistive Sensors
(Standard)



Capacitive Sensors
(Optional)



Visual-Tactile Perception
(Optional)

Communication Methods

CAN Interface

Utilizes a proprietary protocol; baud rate is 1Mbps; default device IDs: left hand 0x28, right hand 0x27; supports broadcast ID 0x7FF (for addressing, identification, and debugging).

RS485 Interface

Adopts the Modbus protocol; baud rate is 256000bps; default device IDs: left hand 0x28, right hand 0x27; supports function codes: 03/04/06/16; UART settings are fixed: 8 data bits, 1 stop bit, no parity.



Linker Hand

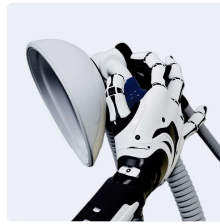
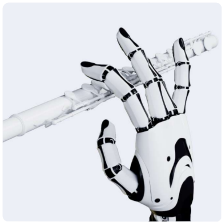
Linker Hand L30

• 17 Active + 4 Passive DOF

• Tendon Drive

Linker Hand L30 is a 21-DoF dexterous hand that **accurately replicates fine human hand movements** with **millimeter-level** operation precision. It adopts advanced **tendon drive** and **highly integrated mechatronic systems** for stable movement and precise control, and supports multi-modal perception (**force, touch, vision**) to enhance real-time perception and interaction reliability.

With high DoFs, multi-modal perception, and leading motion control algorithms, it is widely used in **industrial automation, medical assistance,** and **research experiments**—providing a highly adaptable, reliable end-effector solution.



± 0.20 mm

Repeat Positioning
Accuracy

5_{kg}

Maximum Load

8_N

Maximum Thumb
Tip Force

12_N

Maximum Gripping Force
(Five Fingers)

440°/s

Maximum
Movement Speed

7_N

Maximum Four-Finger
Tip Force



Key Features

Highly Bionic Precise Operation

21 DoFs (17 active + 4 passive) with independent control of thumb and four fingers, enabling accurate replication of fine human hand movements, high repeat positioning accuracy, and delicate gripping force resolution—suitable for precision tasks.

Fast-Response Tendon Drive

Advanced tendon drive and highly integrated mechatronic systems ensure smooth movement and high maximum speed to meet fast-response needs, while achieving lightweight and high compactness for robotic end-effectors.

Multi-Modal Intelligent Interaction

Supports fusion of force, touch, and other sensors to accurately perceive the environment and provide real-time interaction feedback—greatly enhancing adaptability and collaboration in unstructured scenarios.



**Piezoresistive
Sensors**
(Standard)



**Capacitive
Sensors**
(Optional)



**Visual-Tactile
Perception**
(Optional)

Communication Methods

CAN FD Protocol

High transmission rate (up to 5Mbps) for fast response; Supports 64-byte data per frame to handle more sensor data and joint control commands simultaneously; Enhanced mechanisms (e.g., improved CRC check) for higher communication reliability.



Linker Hand



**Linker Hand
O6**



**Linker Hand
O7**



**Linker Hand
L10**



**Linker Hand
L20**



**Linker Hand
L30**

Degrees of Freedom	11	17	20	21	21
Number of Joints	6 Active + 5 Passive DoF	7 Active + 10 Passive DoF	10 Active + 10 Passive DoF	16 Active + 5 Passive DoF	17 Active + 4 Passive DoF
Transmission Type	Linkage Drive	Linkage Drive	Linkage Drive	Linkage Drive	Tendon Drive
Actuation Method	Self-developed Joint Module	Self-developed Joint Module	Self-developed Joint Module	Self-developed Joint Module	Self-developed Joint Module
Control Interface	CAN/RS485	CAN/RS485	CAN/RS485	CAN/RS485	CAN FD
Weight	370g	634.5g	800g	1100g	1400g
Max Load	30kg	25kg	5kg	10kg	5kg
Operating Voltage	DC24V±10%	DC24V±10%	DC24V±10%	DC24V±10%	DC24V
Quiescent Current	0.1A	0.2A	0.2A	0.2A	0.45A
Avg Current (No-Load)	0.4A	0.7A	0.5A	1A	0.63A
Max Current	3A	2.6A	1.59A	3A	2.3A
Repeat Positioning Accuracy	±0.22mm	±0.20mm	±0.22mm	±0.20mm	±0.20mm
Max Thumb Tip Force	28N	14N	12N	18N	8N
Max Four-Finger Tip Force	33N	14N	12N	20N	7N
Thumb Lateral Rotation Range	--	1.05rad(60°)	1.60rad (95°)	1.33rad(76°)	1.323rad(75.8°)
Four-Finger Bending Angle	1.61rad(92.5.9°)	1.20rad(69°)	1.44rad (82.7°)	1.5rad(85.9°)	1.471rad(84.3°)
Thumb Swing Speed	1.36rad/s(78.10°/s)	1.07rad/s(61.61°/s)	5.37rad/s(135.15°/s)	3.28rad/s(188.17°/s)	7.093rad(406.3°/s)
Four-Finger Bending Speed	1.30rad (74.75°)	1.11rad/s(63.42°/s)	3.60rad/s(206.75°/s)	1.29rad/s(73.91°/s)	7.744rad(443.6°/s)
Thumb Bending Speed	2.60rad/s(149.22°/s)	1.77rad/s(104.41°/s)	5.28rad/s(302.77°/s)	0.72rad/s(41.32°/s)	7.638rad(437.6°/s)