

OmniHand Pro 2025 Technical Specifications

OmniHand Pro 2025		
Hardware	Weight	≤820g
	Dimensions	207*98*56mm
	Degrees of Active Freedom(DoA)	12
	Degrees of Freedom(DoF)	19
	Minimum opening/closing time (Typ)	0.7s
	Fingertip repeat Positioning Accuracy(Typ)	0.4mm
	Load Capacity	Five-finger grasp force: 10kg
	Working Voltage	8.3-35.6V
	Communication Interface	CAN-FD
	Working Temperature Range	-20~50°C
	Online Upgrade	Supports OTA Updates
Tactile Sensor	Force Detection	3-dimensional Force at the Fingertips
	Array Resolution	0.1N
	Range of Perception	0~50N
	Maximum Acceptance(Undamaged)	1000N

[1] The above parameters may vary in practical applications depending on different business scenarios and model configurations. Please refer to the actual specifications.

[2] The product appearance may be subject to upgrades and adjustments in the future. Please refer to the physical product delivered at the time of purchase.

• Joint Angle Range:

		Left		Right	
Finger	Joint	Min (°)	Max (°)	Min (°)	Max (°)
Thumb	thumb_roll_joint	0	42	-42	0
	thumb_abad_joint	-54	0	0	54
	thumb_mcp_joint	-49	0	-49	0
	thumb_pip_joint	-74	0	-74	0
	thumb_dip_joint	NA /Coupled joints, coupling relationship reference in the SDK.			
Index Finger	index_abad_joint	-15	15	-15	15
	index_mcp_joint	0	76	0	76
	index_pip_joint	0	85	0	85
	index_dip_joint	NA /Coupled joints, coupling relationship reference in the SDK.			
Middle Finger	middle_abad_joint	-15	15	-15	15
	middle_mcp_joint	0	76	0	76
	middle_pip_joint	0	98	0	98
	middle_dip_joint	NA /Coupled joints, coupling relationship reference in the SDK.			

Ring Finger	ring_mcp_joint	0	79	0	79
	ring_pip_joint	NA /Coupled joints, coupling relationship reference in the SDK.			
	ring_dip_joint	NA /Coupled joints, coupling relationship reference in the SDK.			
Fifth Finger	pinky_mcp_jo int	0	79	0	79
	pinky_pip_joint	NA /Coupled joints, coupling relationship reference in the SDK.			
	pinky_dip_joint	NA /Coupled joints, coupling relationship reference in the SDK.			



