

Dexterous · Precise · Lightweight · Tactile

RevoHuman

Exoskeleton Glove for Human Data Capture



Technical Specifications

Model Number		RevoHuman P1 Glove Exoskeleton Glove	RevoHuman PTV1 Glove Exoskeleton Tactile & Vision Glove	RevoHuman PIVE1 High-Precision Human Data Capture Suite
Category	Specification	Notes: P: Position, T: Tactile, V: Video, E: Ego		
Degrees of Freedom (DoF)	Degrees of Freedom	Hand Encoders: 21 DoF x 2 Wrist Tracker: 6-DoF Pose x 2	Hand Encoders: 21 DoF x 2 Wrist Tracker: 6-DoF Pose x 2	Hand Encoders: 21 DoF x 2 Wrist Tracker: 6-DoF Pose x 2 Head-mounted vSLAM: 6-DoF Pose
	Joint Sensor Specifications	Encoder Accuracy: $\pm 0.1^\circ$ Measurement Range: 0 - 360°	Encoder Accuracy: $\pm 0.1^\circ$ Measurement Range: 0 - 360°	Encoder Accuracy: $\pm 0.1^\circ$ Measurement Range: 0 - 360°
Additional Modalities	Tactile	/	211 Tactile Sensing Points x 2 Resolution: 0-25 N Measurement Range: 0.01 N	211 Tactile Sensing Points x 2 Resolution: 0-25 N Measurement Range: 0.01 N
	Wrist Camera	/	FOV: 90° 1080P/720P/VGA@30FPS Electronic Rolling Shutter	FOV: 90° 1080P/720P/VGA@30FPS Electronic Rolling Shutter
	Ego Headset	/	/	RGB 1080p Global Shutter x 2 Grayscale 640x480 Global Shutter x4 vSLAM Positioning Accuracy 2mm FOV: 190° Ultra-Wide FOV
Product Specifications	Sampling Rate	Joint: 200Hz	Joint/Tactile: 200Hz Wrist Camera: 30FPS	Joint/Tactile: 200Hz Wrist Camera: 30FPS Ego Headset: 60FPS
	Power Supply	5V Wired	5V Wired	Glove: 5V Wired Ego Headset: Wireless Includes a Replaceable Power Bank
	Communication Interface	USB Interface	USB Interface	Local Storage on IPC Supports Cloud Upload and Direct Export
	Weight	Glove: 100g	Glove: 125g	Glove: 125g Ego Headset: 350g IPC: 500g
	Glove Size	180mm x 145mm x 35 mm	180mm x 145mm x 35 mm	180mm x 145mm x 35 mm
Selection Guide	Data Output	USB Wired Connection Includes Glove SDK and PC Software	USB Wired Connection Includes Glove SDK and PC Software	Turnkey Dexterous Manipulation Data Capture Solution
	Recommended Applications	Real-World Robot Teleoperation Joint-Only Hand Data Capture	Multi-Modal Hand Data Capture Supports Custom Integration and Development	Turnkey Ego + Tactile Exoskeleton Solution for Dexterous Manipulation Data Collection