

Embodied Dual-arm Lifting Platform

Product Model: RMC-AIDAL

Operation Space Fully Covered

With a flexible range, it fully covers human workspace up to 2.2 meters high.

Powerful Operational Capability

Dual arms with grippers can handle up to 8kg, highly practical.

Open Source Ecological Support

A well-established open-source environment supports scientific research and scenario exploration.



Multi-angle Intelligent Recognition

3 deep vision sensors and 2 RGB cameras meet recognition, grasping, and environmental monitoring needs.

Data Collection & Model Training

The high real-time performance of gripper control facilitates data collection and model training for dual-arm operations.

Standard Configuration

Master control: Jetson AGX Orin*1
Robotic arm: RM65-B-V*2
Binocular vision: D435*3
RGB Surveillance camera*2
Two fingers parallel clawsRMG24*2
Bollard*1 Moving chassis*1

Users can develop data acquisition and model training of wireless teleoperation and dual-arm operation based on the platform, and carry out inspection of various scenarios and independent planning and execution of operational tasks. The application field is wide, covering industrial, commercial, household and scientific research scenarios.

Equipment Introduction



The double arm lift platform is a highly integrated lightweight humanoid operation platform that integrates the core modules of the ultra-lightweight humanoid robot arm RM65-B-V, lift column, multi-channel vision sensor and autonomous navigation chassis. The platform has the ability of autonomous navigation and mobility, and can operate flexibly in a large space to achieve multi-perspective detection and target identification and positioning functions.

Standard Configuration

Configuration Item	Quantity
Master Control Jetson AGX Orin	1
Robotic Arm RM65-B-V	2
Binocular Vision D435	3
RGB Surveillance Camera	2
Parallel Gripper RMG24	2
Lift Column	1
Moving Chassis	1

Machine Parameter

Category	Parameter
Overall Dimension	640*450*1700mm (Folded condition)
Machine Weight	90kg
Working Range	Up and down: 0-2200mm, around: 0-1900mm, forward: 0-600mm;
Lithium Iron Phosphate Battery	DC48V 20AH
Master Control	(NVIDIA) Jetson AGX Orin 64G+1T SSD

Robotic Arm RM65-B-V

Category	Parameter
Dof	6
Rated Payload	5kg (Single arm)
Payload	610mm
Repeatability	±0.05mm
Self-Weight	7.6kg (Single arm)
Communication Interface	Ethernet/WIFI/RS485
Max. Joint Speed	J1-J2 180° /s、 J3-J6 225° /s

Binocular Vision D435

Category	Parameter
Depth Vision	91.2°×65.5°×100.6°
Depth Stream Output Resolution	640*480
Depth Stream Output Frame Rate	90fps
Minimum Depth Distance	0.3m
Maximum Range	Over 10m
RGB Sensor Frame Rate	30fps
RGB Sensor Field Of View	69.4°×42.5°×77°

Moving Chassis

Chassis Module	WSD-6006
Driving Mode	USB2.0 (UVC Protocol)
Speed	200W
Angle	38*38mm
Global Positioning Accuracy	FF Fixed Lens
Navigation System	120°

Parallel Gripper RMG24

Category	Parameter
Overall Size	110 (L) *60 (W) *130 (H) mm
Full Stroke	65mm
Finger Height	50mm
Weight	≤500g
Rated/Maximum Load	4kg/5kg
Holding Force	Max 150N
Opening/Closing Time	0.8s (Full stroke)
Repeatability	±0.05mm
Replaced Finger	Extended finger: stroke is 100mm, fixing method: screw fixation
Power-off Buffer	After power failure, the hand claw is affected by the load and gravity, and slowly opens
Rated Voltage	24V

Lift Column

Power Module	WHJ60 Actuator
Lifting Distance	900mm