



# KR-UAV-001

Robotic Arm For UAVs



# Features

- **Control and Stability**

This arm features 6 Degrees of Freedom (6DoF), allowing precise control over XYZ positioning and yaw/roll/pitch rotations. Integrated with an IMU, it absorbs vibrations through gimbal operations, ideal for drones and other mobile platforms. (Patented technology)

- **Material Excellence**

Constructed using A7075 aluminum alloy for a combination of high strength and lightweight. This makes it perfectly suitable for drones and unmanned ground vehicles (UGVs), powered directly from batteries.

- **High Performance Motors and Gears**

The arm is equipped with compact, high-torque BLDC motors, 20-bit resolution absolute encoders, backlash-free harmonic gears, and highly controllable small motor drivers. Rapid responses and precise control are achieved through high-speed EtherCAT communication.



# Features

- **Versatile Compatibility**

Offers complex motion instructions using flowcharts and 6DoF action commands from iOS and Android devices. Capabilities include teaching and monitoring.

- **Advanced Development Support**

Comes with built-in Ubuntu/ROS2 for application development and supports third-party application development through an SDK.

- **Enhanced Sensing Capabilities**

Features a 6DoF force/torque sensor enabling direct human teaching, collision detection, and applications requiring force/torque control.

- **Customizable End Effector**

Standard torque-controlled gripper provided, with customization options available to suit various applications.





# Features

- **Intelligent Vision System**

Integrates with the Intel RealSense Depth Camera to pinpoint three-dimensional coordinates of objects, enabling automated pick-and-place operations.

- **Sensor Integration**

Capable of integrating additional sensors like 3D and 2D Lidar for mapping and navigation, enhancing coordination with drones and UGVs.

- **Extensive Connectivity**

Supports connections to external devices or wireless units via Ethernet, USB, UART, GPIO, and RS485 interfaces.

## Specs

Material:	A7075, A5052
Size:	212.9mm x 202.5mm x 259.3mm(x,y,z)
Weight:	Robot Arm 1400g, Control unit 1000g
Power:	24V, **A (Battery power possible)
Temperature:	0~50°C

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