

INDUSTRIAL PRODUCT DATASHEET

reBot Arm B601-DM Body Motor Kit

The reBot Arm B601-DM Body Motor Kit is an open-source DIY motor kit with the popular DAMIAO motor combination, supporting ROS, Isaac Sim, and LeRobot for teleoperation, home automation, and precision tasks.

SKU

100063143

UPDATED

2026-08-10 05:59:34

PRICE

\$829.00(Excl. VAT)



Overview



The reBot Arm B601-DM Body Motor Kit is a fully open-source DIY robotic arm, including 3 DAMIAO 4340P and 3 DAMIAO 4310 motors. It supports frameworks like ROS1/2, Isaac Sim, and LeRobot, enabling applications in teleoperation, assistive home automation, and precision tasks.

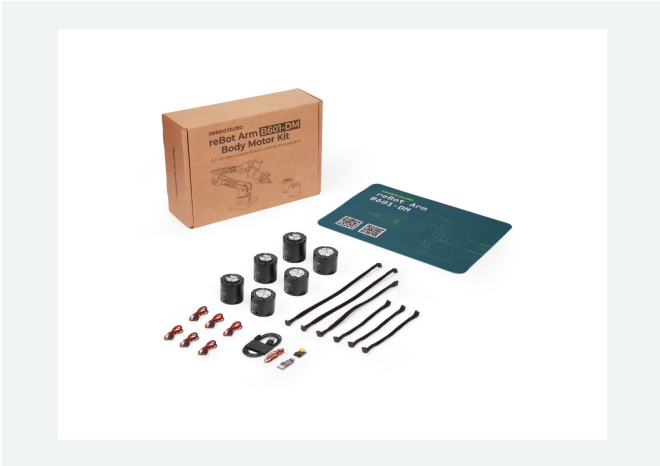
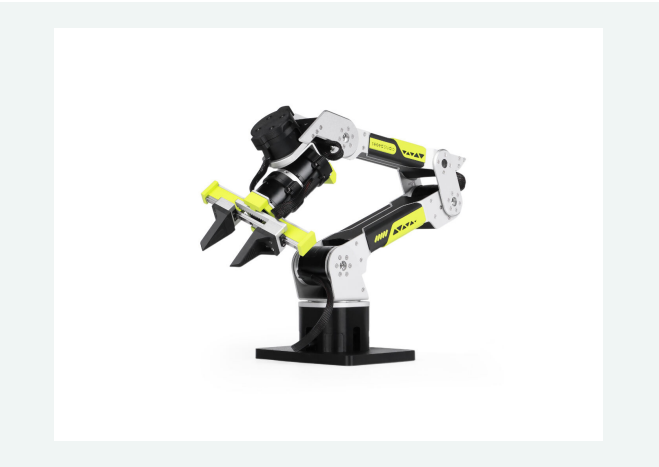
Key Features

- **Body Motor Kit:** This kit includes 3 DAMIAO 4340P and 3 DAMIAO 4310 motors, representing the most popular Damiao motor combination for robotic arms on the market.
- **Fully Open-Source:** A truly 100% open-source robotic arm in terms of hardware and software. It includes BOM lists, hardware drawings, software, and algorithms—everything you need.
- **Detailed Assembly Tutorials:** Provide ultra-detailed assembly steps and video tutorials.
- **Framework Compatibility:** Supports mainstream robotics development frameworks such as ROS1/2, Isaac Sim, and LeRobot.
- **Constant Content Updates:** As the project progresses, we will gradually update the latest algorithms and launch a series of completely free courses.

Note:

This product is a DIY kit (not a finished product) requiring self-assembly, wiring, and debugging, with risks of personal injury (e.g., pinching, impact) and property damage. By purchasing, you confirm you have read, understood, and accepted all terms, and voluntarily assume all risks during assembly and use. This product is only for professionals with robotics, electrical, or mechanical expertise; minors and persons with no/limited civil capacity are strictly prohibited from operation. Follow the manual strictly for assembly, calibration, and setup. We only warrant core components against factory material defects (**1-Month Warranty for Un-assembled Version / 6-Month Warranty For Assembled Version**) and accept no liability for any personal injury or property damage. For full terms, refer to the attached **Mechanical Arm DIY Kit - Safety Disclaimer and Risk Notice**.

Product Gallery

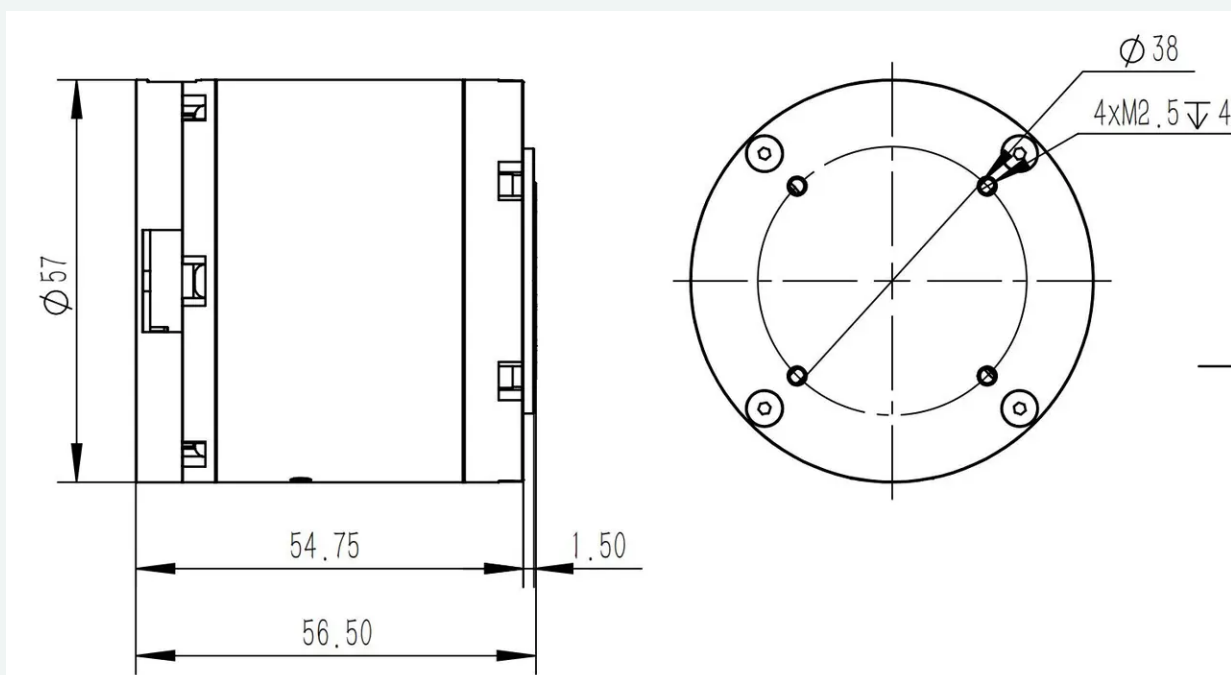
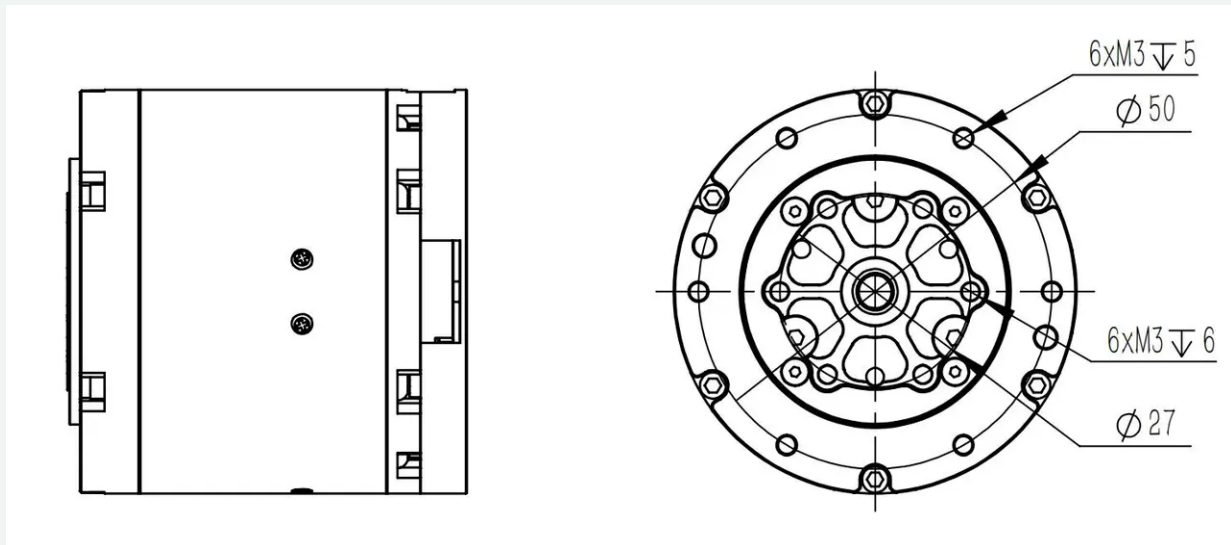


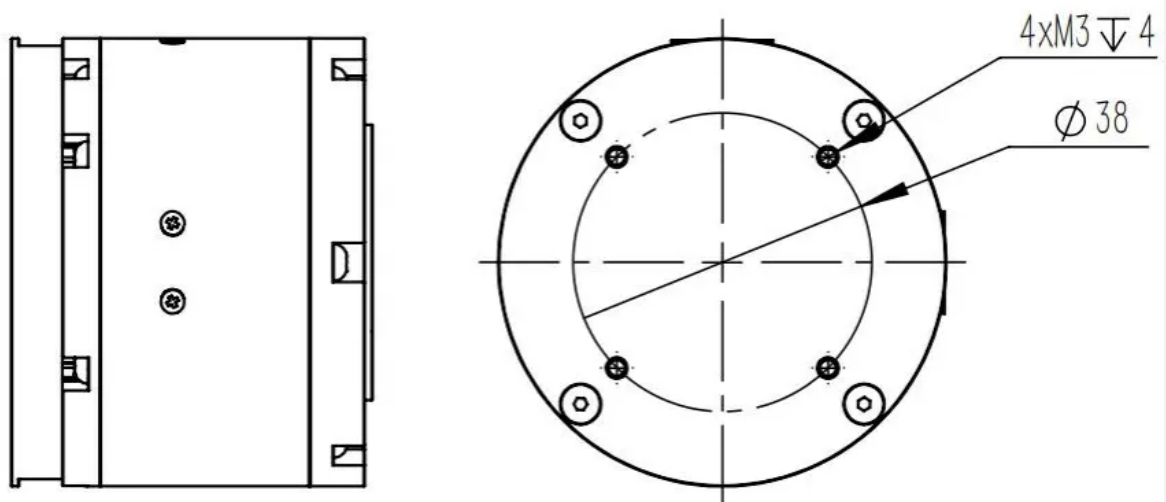
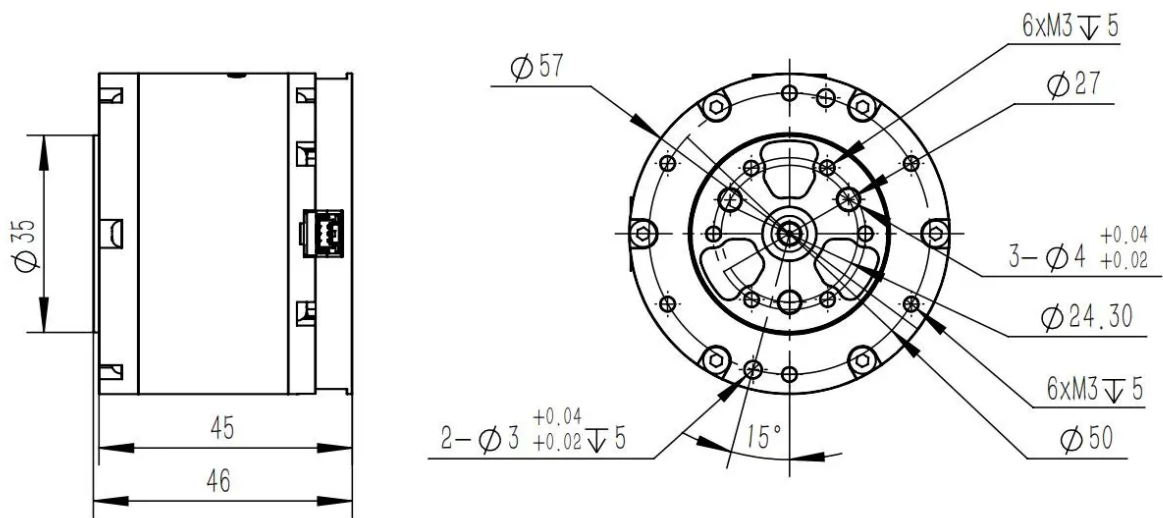
Specification

Parameter	DM4310	DM4340P
Rated Voltage	24V	24V
Rated Current	2.5A	2.5A

Peak Current	7.5A	8A
Rated Torque	3NM	9NM
Peak Torque	7NM	27NM
Rated Speed	120rpm	36rpm
No-Load Max Speed	200rpm	52rpm
Gear Ratio	10:1	40:1
Number of Pole Pairs	14	14
Phase Inductance	340μH	340μH
Phase Resistance	650mΩ	880mΩ
Outer Diameter	56mm	57mm
Height	46mm	56.5mm
Motor Weight	Approx. 300g	Approx. 375g
Encoder Resolution	14 bits	
Number of Encoders	2	
Encoder Type	Magnetic Encoder (Single-turn)	
Control Interface	CAN@1Mbps	
Tuning Interface	UART@921600bps	
Control Modes	MIT Mode; Speed Mode; Position Mode	

Hardware Overview





Applications

- **Teleoperation & Remote Robotics Control:** The reBot Arm B601 enables intuitive teleoperation for remote manipulation, data collection, and human-in-the-loop training. Combined with AI robotics frameworks like Hugging Face LeRobot, it supports datasets and pre-trained model and policies, and imitation learning workflows that translate human actions into robotic behaviors, accelerating embodied AI development.
- **Assistive Automation for Home Daily Tasks:** The reBot Arm B601 supports the development of assistive robotics for everyday tasks, from pick-and-place to simple household automation. By combining vision and learning-based control, the robot can adapt to unstructured environments and variable objects, helping bring embodied AI into practical, human-centered scenarios.
- **Precision Tasks in Harsh or Constrained Environments:** With ± 0.2 mm repeatability and stable actuation, the B601 is suited for precise tasks in challenging or unsafe environments. Developers can prototype applications such as inspection, sample handling, or fine manipulation under constrained conditions. Its support for dynamic motion execution enables more reliable interaction with uncertain or sensitive objects. This makes it a strong platform for validating robotics solutions before scaling to industrial systems.

Part List

Item Name	Quantity
DAMIAO 4310 Actuator Motor	3
DAMIAO 4340P Actuator Motor	3
DAMIAO USB-CAN Driver Board	1
XT30 2+2 Power Separation Board	1
BCCA4011 XT30 (2+2) Straight-to-Right-Angle 30CM Cable	1
BCCA4012 XT30 (2+2) Dual Right-Angle 35CM Cable	1
BCCA4012 XT30 (2+2) Dual Right-Angle 20CM Cable	2
BCCA4009 XT30 (2+2) Dual Straight 30CM Cable	3
Mouse Pad	1
USB cable	1

Compliance & Logistics

HSCODE	8501310000
USHSCODE	9023000000
UPC	
EUHSCODE	9023001000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/reBot-Arm-B601-DM-Body-Motor-Kit-p-6752.html>
- [reBot one-pager datasheet](#)
- [reBot open-source GitHub repo](#)
- [Mechanical Arm DIY Kit - Safety Disclaimer and Risk Notice](#)

Seeed Technology Co.,Ltd.

9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676

Web: www.seeed.cc

Shop: www.seeedstudio.com