

seeed studio

INDUSTRIAL PRODUCT DATASHEET

reBot Arm B601-RS (without power supply)

Affordable, open 6+1-DoF robotic arm with ± 0.1 mm repeatability for sim-to-real learning, teleoperation, lab automation, and industrial logistics.

SKU

100019336

UPDATED

2026-09-18 11:02:56

PRICE

\$1699.00(Excl. VAT)



Overview



The reBot Arm B601-RS is an affordable, open 6+1-DoF robotic arm built for Physical AI and sim-to-real learning, offering ± 0.1 mm repeatability and compatibility with ROS, NVIDIA Isaac Sim, LeRobot, and Pinocchio. It ships without a 48V 15A power supply or G-clamp, both required for normal operation, and supports applications from robotics education and laboratory automation to teleoperation and industrial logistics.

Key Features

The reBot Arm B601-RS is shipped **without** a **48V 15A power supply** or a **G-clamp**. Both are required for normal operation. For teleoperation, you will also need a **Star Arm 102 (Leader Arm)** and a **12V 2A AC/DC Adapter (5-in-1)**. If you need any of these accessories, please visit the **reBot Arm B601-RS Bundle** page, where they can be purchased together.

- **Built for Physical AI** — Affordable 6+1-DoF robotic arm for sim-to-real learning.
- **Completely Open** — Hardware, software, CAD, SDK, BOM, and algorithms included.
- **Learn Faster** — Comprehensive tutorials from assembly to deployment.
- **Always Improving** — Free algorithm updates, demos, and learning resources.
- **Precision Motion** — ± 0.1 mm repeatability powered by RobStride Dynamics motors.
- **Robotics Ecosystem** — Compatible with ROS, NVIDIA Isaac Sim, LeRobot, Pinocchio.
- **More Robotics for Less** — Professional capabilities at an accessible price.

Join our Discord community for discussions and support:

<https://discord.gg/wsfpnbm3cU>

One-Stop Guided Setup & Cloud-Powered Robot AI Training

SenseCraft Robotics is an in-house developed, exclusive platform from Seeed Studio. It delivers an all-in-one robot-AI workflow featuring guided setup, cloud training and lightweight local validation. It lets you finish essential pre-training steps — device pairing, serial binding, camera binding, calibration check and teleoperation check — all in one place, greatly streamlining your setup for education labs, R&D PoCs and early-stage robot validation projects.

Product Gallery



Dear reBot Arm B601 RS Explorer,

Thank you for joining us on this exciting open-source robotics journey!

By choosing reBot Arm B601 RS, you are not only exploring a desktop open-source robotic arm, but also helping drive the future of Physical AI and open robotics together with developers, researchers, and makers around the world.

reBot Arm B601 RS is a fully open-source 6-DOF desktop robotic arm.

- Designed with true openness from hardware to software — including hardware design files, BOM, control software, and core algorithms.
- It supports mainstream development frameworks such as Python SDK, ROS/ROS2, Isaac Sim, and LeRobot, making it easier for developers to learn, build, and innovate in robotics.

At the same time, we would also like to be transparent with our community: as an evolving open-source hardware platform, the current version may still have undiscovered issues or areas for improvement. But that is exactly where the value of open-source collaboration shines.

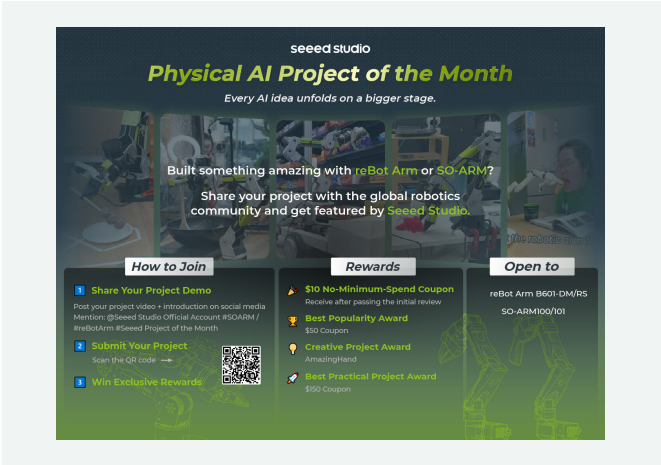
We sincerely look forward to exploring, debugging, and improving reBot Arm together with you throughout your development journey. Every piece of feedback, GitHub issue, pull request, or community contribution helps make reBot Arm B601 RS more stable, capable, and developer-friendly.

We also warmly encourage you to share your journey with the community — from unboxing and assembly, to debugging, experimentation, and advanced robotics projects.

Feel free to join our Discord community, contribute ideas and code on GitHub, and share your projects or tutorials on YouTube, LinkedIn, or X while @Seeed Studio. We're excited to see developers around the world learn, collaborate, and build together!



Join Us in Discord reBot GitHub

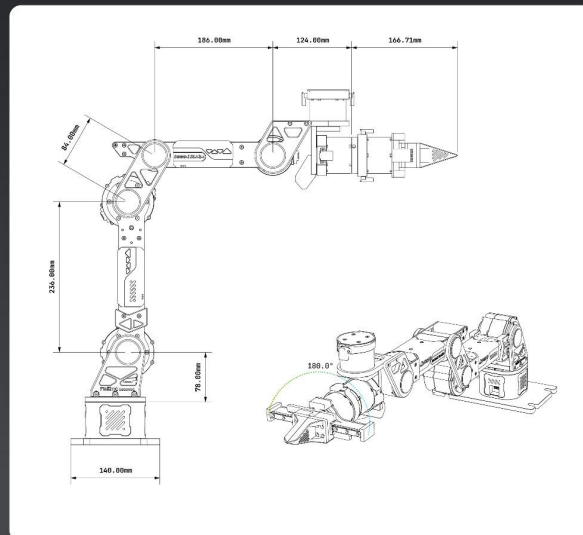


Specification

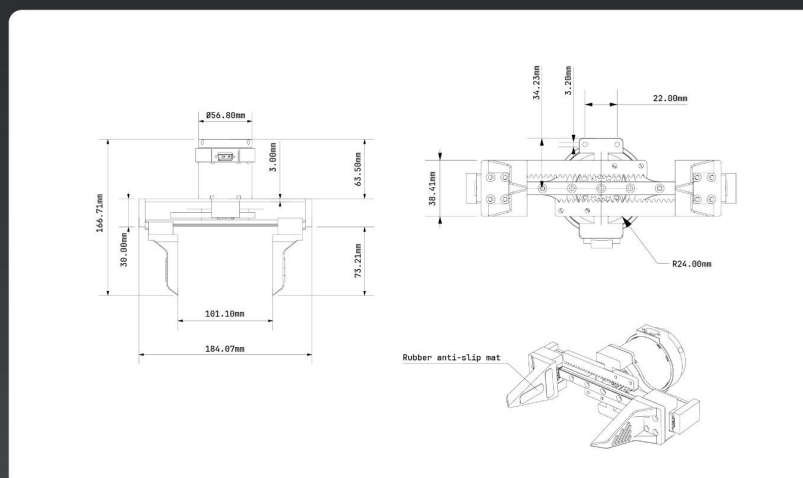
Degrees of Freedom	6+1
Reach	754mm
Joint Range of Motion	J1:±150° J2:220° - 0° J3:220° - 0° J4:±90° J5:±90° J6:±180° Gripper:345° - 0°
Payload	2.5kg
Maximum load	5kg
Repeatability	±0.1mm
Weight	6.5kg
Servos	ROBSTRIDE 06 x3 ROBSTRIDE 00 x4
Operating Temperature	-20°~50°
Power	48V 15A
ROS1	✓
Moveit1	✓
ROS2	✓
Moveit2	✓
Python	✓
Lerobot	✓
Isaac Sim	✓
Pinocchio	✓
Pinocchio	✓
Open Source	✓

Hardware Overview

Product Dimensions



Product Dimensions



Applications

- **Learn & Build Robotics Easily:** Lower the barrier to robotics with step-by-step tutorials. The reBot Arm B601-RS helps you go from assembly to intelligent robot control quickly and confidently.
- **Research & Laboratory Automation:** High-precision robotics for liquid handling, sample transfer, and laboratory workflows. Built for repeatability, delicacy, and rapid experimentation.
- **Teleoperation & Physical AI:** Power real-time control, data collection, and sim-to-real learning with leading robotics frameworks including LeRobot and Isaac Sim. A dexterous “hand” for embodied AI.
- **Industrial Automation & Logistics:** ± 0.1 mm precision, up to 5 kg payload. The reBot Arm B601-RS enables precision assembly, inspection, sorting, and material handling in manufacturing and warehouse environments. Compact and easy to integrate into existing production lines and workcells.

Part List

Assembled Robotic Arm (with gripper)	1
RobStride USB-CAN Driver Board	1
CANABLE	1
XT30 2+2 Power Separation Board	1
Hex key wrench set	1
Mouse pad	1
Wire kits	1

Compliance & Logistics



HSCODE	9023009000
USHSCODE	9023000000
UPC	
EUHSCODE	9023001000
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- <https://www.seeedstudio.com/reBot-Arm-B601-RS-Assembled-Kit-with-Gripper-p-6865.html>

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