seeed studio

INDUSTRIAL PRODUCT DATASHEET

SO-ARM100 Low-Cost AI Arm Servo Motor Kit Pro for LeRobot (Without 3D Printed Parts)

Open-source, low-cost robotic arm kit for LeRobot, supporting imitation learning and reinforcement learning with Nvidia Jetson compatibility.

SKU	UPDATED	PRICE
114993609	2026-09-14 02:49:50	$220.00(Excl. VAT)



Overview



The SO-ARM100 Low-Cost AI Arm Servo Motor Kit Pro for LeRobot is an open-source, low-cost robotic arm solution from TheRobotStudio, designed for integration with the LeRobot platform for real-world robotics applications. It provides comprehensive open-source learning resources and is compatible with Nvidia reComputer J4012 Orin NX 16 GB for deployment, supporting imitation learning and reinforcement learning tasks.

Key Features

From China warehouse to the United States, choose "**US Direct Group Shipping**" to enjoy duty-free !

- **Open-source and low-cost**: It is an open-source, low-cost robotic arm solution from **TheRobotStudio**.
- **Integration with LeRobot**: Designed for integration with **LeRobot platform** which offers PyTorch models, datasets and tools for reinforcement learning and imitation learning for real-world robotics applications (including data collection, simulation, training and deployment).
- **Abundant learning resources**: Provides comprehensive open-source learning resources like assembly and calibration guides, and tutorials for testing, data collection, training and deployment to assist users in quickly getting started and developing robotic applications.
- **Compatible with Nvidia**: Deploy this arm kit with reComputer J4012 Orin NX 16 GB.

Note: We suggest adding 3D Printed Skeleton together with your order. We have fine-tuned the 3D printed parts for easier installation

Product Gallery











Specification

SO-ARM10x Low-Cost AI Arm Kit and Arm Kit Pro				
Type	SO-ARM100		SO-ARM101	
	Arm Kit	Arm Kit Pro	Arm Kit	Arm Kit Pro

Leader Arm	12x (7.4V) 1:345 gear ratio motors for all joints	12x (12V) 1:345 gear ratio motors for all joints	1x (7.4V) 1:345 gear ratio motor for No.2 joint	
			2x (7.4V) 1:191 gear ratio motors for No.1 and No.3 joints	
			3x (7.4V) 1:145 gear ratio motors for No.4, No.5 joints and the No.6 gripper	
Follower Arm			Same as SO-ARM100	Same as SO-ARM100
Power Supply	5.5mm*2.1mm DC 5V4A	5.5mm*2.1mm DC 12V2A	5.5mm*2.1mm DC 5V4A	5.5mm*2.1mm DC 12V2A For Follower Arm
				5.5mm*2.1mm DC 5V4A For Leader Arm
Angle sensor	12-bit magnetic encoder			
Recommended Operating Temperature Range	0℃～40℃			
Communication Method	UART			
Control Method	PC			

Applications

- **Imitation learning and Reinforcement learning:** The LeRobot framework is compatible with the SO-ARM100 robotic arm. It provides complete data collection, training, and deployment for teaching the robotic arm, and also has a comprehensive simulation platform. On the Nvidia Jetson edge device, it's easy and quick to train a customized robotic arm to complete grasping and placing tasks. For detailed tutorials, please refer to: LeRobot - NVIDIA Jetson AI Lab

Part List

STS3215 Servo Motor(with screws)	x12
Servo Adapter Board for Seeed Studio XIAO	x2
Stud	x8
Screw	x8
Power Supply Cable (Multiple head)	x2
USB-C Cable	x2
DC Power Pigtail Cable	x2

STS3215 Servo Motor(with screws)	x12
Bus Servo Adapter	x2
Power Supply Cable (One head)	x2
USB-C Cable	x2

Compliance & Logistics

HSCODE	9023009000
USHSCODE	8501106080
UPC	
EUHSCODE	9023001000
COO	CHINA

Resource Links

- https://www.seeedstudio.com/SO-ARM100-Low-Cost-AI-Arm-Kit-Pro-p-6343.html
- STS3215 Servo Motor Datasheet
- Finedtune 3D printed parts files
- Original SO-ARM100 3D printed parts
- Servo Adaptor Board for Seeed Studio XIAO Datasheet（Purchase after March 03 2025）
- Serial Bus Servo Drive Board DataSheet（Purchase before March 03 2025）
- reComputer J301x Datasheet
- reComputer J401X Datasheet

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