

A black and silver 7-DoF humanoid robotic arm, labeled 'NERO', is shown against a background of concentric circles. The arm has a white 'NERO' logo on its upper section and a red and white logo on its elbow. It is equipped with a black gripper at the end.

ROS2™

GAZEBO

python™

NERO

7-DoF
Humanoid
Robotic Arm

Lightweight

Research

Flexible

Génération
ROBOTS

NERO 7-DoF Robotic Arm

Engineered for Embodied AI and Humanoid Robotics, NERO's fully open architecture features a lightweight design with 7-DoF. Flexible solution for rapid, easy deployment for academy and R&D labs.

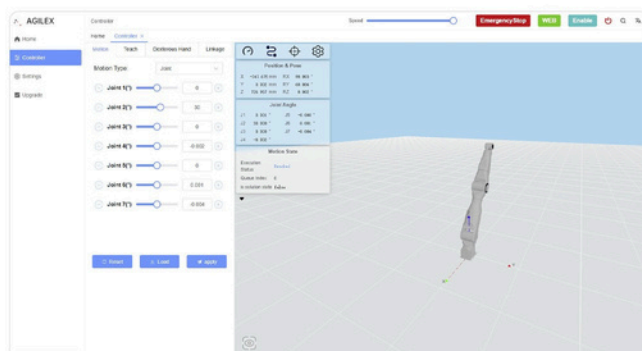


Performance & Precision

NERO features a **7-DOF** humanoid structure, engineered for exceptional spatial reach and dexterity. Utilizing self-developed motors, the **4.8kg lightweight** body stably supports a **3 kg payload**, paired with **± 0.1 mm repeatability**.

Full-Stack & Flexible Deployment

Full-stack control via **CAN/HTTP/TCP**, plus intuitive modes: **Drag-and-Teach**, **Offline Trajectory**, **API**. Seamlessly compatible with **Python SDK & ROS1/ROS2**, and easily integrates with AgileX mobile chassis for a complete Embodied Platform.



Innovation Platform

NERO accelerates research across key domains: **Embodied AI**, **Humanoid Robots**, **Imitation/Reinforcement Learning** and **precision interaction**. It enables end-to-end capability validation from perception and cognition to action execution.

KEY ADVANTAGE



7-DoF achieves dexterous & human-like wrist performance



Modular interface compatible with grippers, dexterous hands, etc.



Delivers high-quality physical interaction datasets

NERO

7-DoF Humanoid Robotic Arm

Humanoid Dynamic Manipulation
Embodied Platform

7DoF

Degrees of Freedom

3kg

Payload

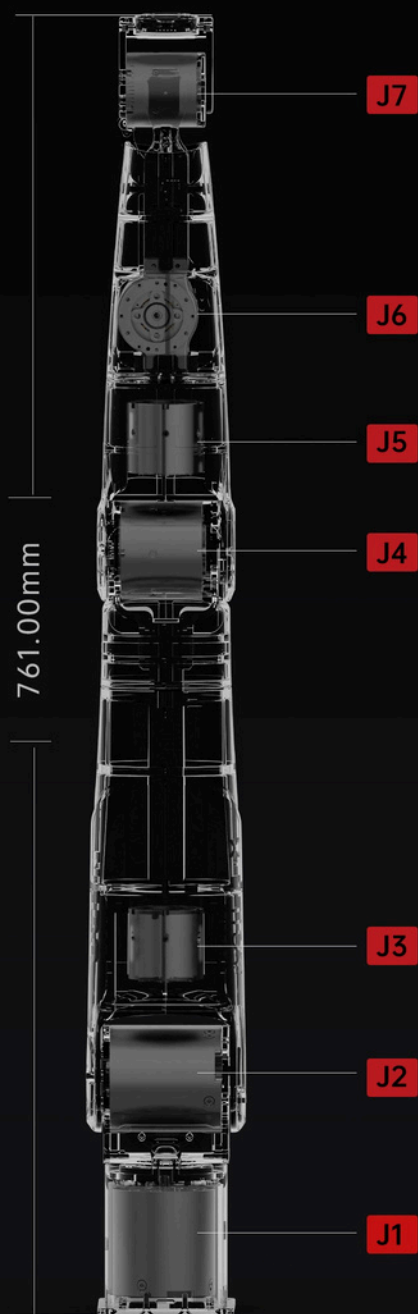
$\pm 0.1\text{mm}$

Repeatability

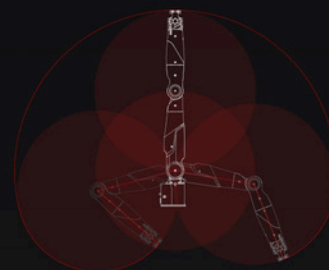


AGILE X
Robotics

NERO Parameter Configuration



DoF	7	Repeatability	±0.1mm
Payload	3kg	Reach	580mm
Weight	4.8kg	Input Voltage	DC24V
Consumption	Max≤150W; Average≤60W		
Material	Aluminum& Plastic Housing		
Controller	Intergrated		
Communication	CAN/ HTTP/ TCP		
Control Method	Drag Teaching/ Offline Trajectory/ API/ PC		
External Interface	Power*1/ CAN*1/ EtherCAT *1		
Base Installation Dimensions	70mm*70mm*M5*4		
Operating Environment	Temperature: 0-50°C; Humidity: 25%-85%; Non-Condensing		
Noise	<60dB		
Installation	Table/Side/Upside Down Mounting		
Joint Maximum Speed	J1:180°/s J2:180°/s J3:180°/s J4:225°/s J5:225°/s J6:225°/s J7:225°/s		
Joint Motion Range	J1:-157°~157° J2:-15°~190° J3:-160°~160° J4:-60°~125° J5:-160°~160° J6:-43°~58° J7:-90°~90°		



The parameter configuration information shown on this page is for reference only, and is subject to actual product delivery.

Generation ROBOTS

Brand of **NGX** ROBOTICS



+33 (0)5 56 39 37 05



contact@generationrobots.com



1 rue Pierre-Georges Latécoère 33700 Mérignac, France

www.generationrobots.com

