

AGIBOT A3

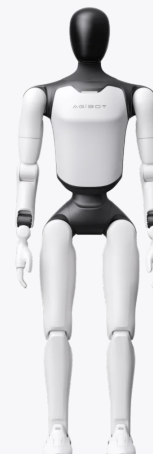
A3 Standard & A3 Developer

Humanoid platform for performance, interaction, research and development

173 cm height

55 kg

31 active DoF



Product overview

The AGIBOT A3 is a full-size humanoid robot with 31 active degrees of freedom. The platform combines dynamic motion, visual and acoustic perception, multimodal interaction and connected group control. The Standard version provides the main functions approved by AGIBOT. The A3 Developer adds an open platform for secondary development, proprietary software and individual system integrations.

Performance data

Peak joint torque	320 Nm
Walking / running	up to 1.8 / 5 m/s
Payload per arm	5 kg with actuator
Peak power	12 kW at 150 A
Power-to-weight ratio	0.218 kW/kg

Energy & operation

Battery capacity	1,152 Wh
Battery system	dual, redundant
Operating time	up to 10 hours
Battery replacement	hot-swap in 10 s
Charging time	up to 2 hours

Typical applications

PERFORMANCE

Stages, shows and coordinated motion sequences

INTERACTION

Entertainment, presentations and visitor communication

RESEARCH

Humanoid robotics, perception and motion control

DEVELOPMENT

Custom software and integrations with the Developer version

Technical data & versions

A3 Standard and A3 Developer

A3 STANDARD

Use of the main functions approved by AGIBOT. No secondary development at platform level.

Supplied with demo hands

A3 DEVELOPER

Open platform for secondary development, proprietary software, customer-specific algorithms and individual integrations.

Supplied with demo hands

Mechanics, sensors and communication

Dimensions	173 x 52 x 30 cm
Weight	55 kg
Degrees of freedom	31 active
Neck	2 DoF
Arms	2 x 7 DoF
Waist	3 DoF
Legs	2 x 6 DoF

Cameras	2 x RGB
Positioning	GPS + UWB, < ±10 cm
Audio	8-channel microphone array
Speakers	2 x 5 W
Display	curved large-format screen
Wireless	WiFi, Bluetooth, 4G/5G
Mobile network	dual-module 5G, dual SIM

Computing platform and software

- COMPUTING MODULES

RK3588 and RK3588S for interaction and motion control.
- LINKCRAFT

Generate, record and share motions in real time; Voice-to-Action for synchronized motion and audio commands.
- GROUP CONTROL

Software for Windows, macOS and Linux; configuration of motion, expression, speech and formations.
- MULTI-ROBOT OPERATION

Control of more than 100 units via UWB without modifications.
- SYSTEM MAINTENANCE

Handheld remote control and OTA upgrades.

Interaction and reliability

Shoulder touch sensors, an interactive screen, a chest breathing light and ear interaction lights complement speech and multimodal interaction. The platform has undergone 92 automotive-quality tests and is designed for a service life of up to three years. One person can transport the robot, and it fits inside a standard SUV.

Note

Technical data according to the provided manufacturer and product information. Subject to change.