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INDUSTRIAL PRODUCT DATASHEET

Reachy Mini Lite - 9-DoF Open Source Desktop Humanoid Robot, USB-Tethered for Embodied

Reachy Mini Lite: an open-source 9-DoF desktop humanoid robot for embodied AI, multimodal data collection, HRI research, and STEM education.

SKU	UPDATED	PRICE
100025004	2026-09-09 09:31:03	$399.00(Excl. VAT)



Overview



The Reachy Mini Lite is a 9-DoF open-source desktop humanoid robot featuring a motorized head, animated antennas, wide-angle camera, 4-microphone array, and 5W speaker. It provides seamless Python integration, Hugging Face Spaces support, and USB-tethered processing, making it suitable for embodied AI companions, multimodal data collection, HRI research, and STEM education.

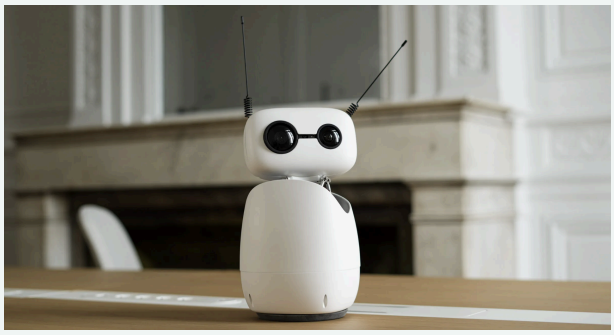
Key Features

- **Open-Source & Community Driven:** Gain complete access to hardware designs, software SDKs, and simulation environments, allowing you to customize, improve, and share your own robotic behaviors within the global Hugging Face ecosystem.
- **Highly Expressive Interaction:** Features a motorized head with 6 Degrees of Freedom (DoF), full-body rotation, and signature animated antennas that twitch and move to convey personality and emotion during human-robot engagement.
- **Multimodal AI Sensing:** Equipped with a wide-angle camera, a 4-microphone array, and a 5W speaker, Reachy Mini can "see," "hear," and "speak," making it the ideal hardware for testing real-world vision and speech models.
- **Seamless Python Integration:** Prototype and deploy applications effortlessly using the intuitive Python SDK. With built-in support for Hugging Face Spaces, you can download and run ready-to-use "app store" behaviors like hand-tracking or AI conversation in just a few clicks.
- **Versatile Build Versions:** Available as an easy-to-assemble kit in two configurations—the **Lite** version (USB-tethered for computer-driven processing) and the **Wireless** version (fully autonomous with an onboard Raspberry Pi 4 and battery).

Note

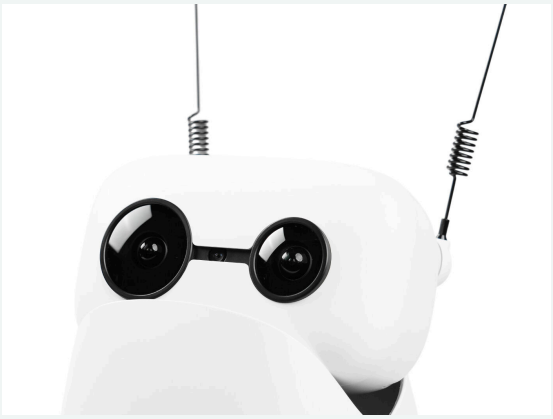
This product has shipping restrictions for certain countries. It can be shipped to the following regions: China & Taiwan、Japan、South Korea、Australia、Mexico、Brazil、Argentina、Chile、Colombia、South Africa、India、Indonesia、Israel、Kuwait、Malaysia、Philippines、Qatar、Saudi Arabia、Singapore、Thailand、Türkiye、United Arab Emirates、Vietnam、New Zealand.

Product Gallery











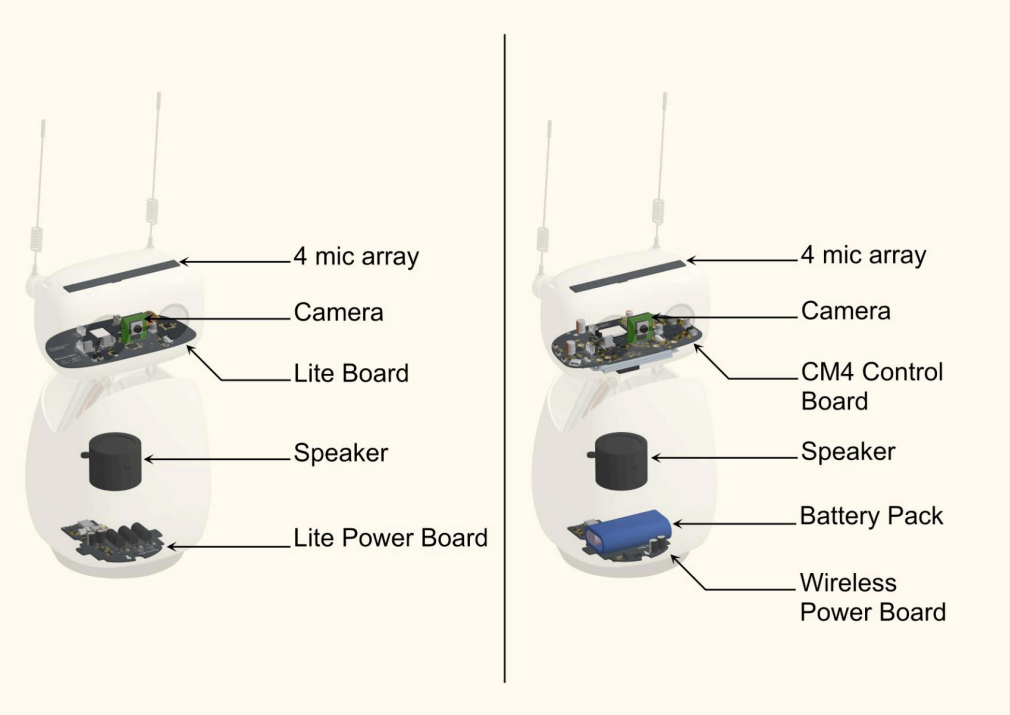


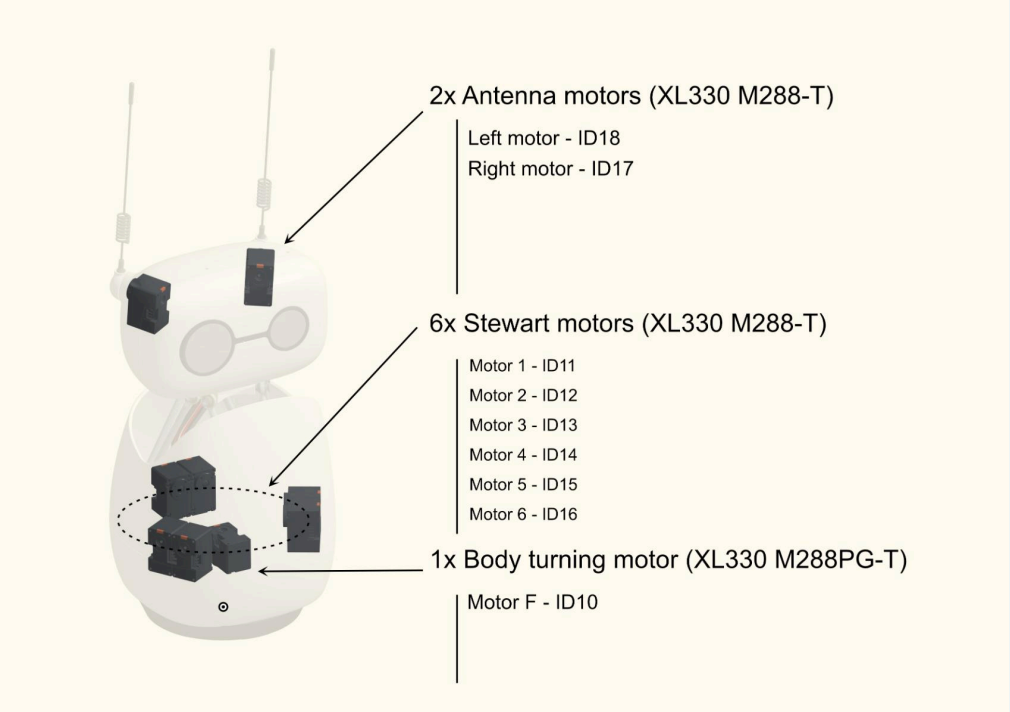
Specification

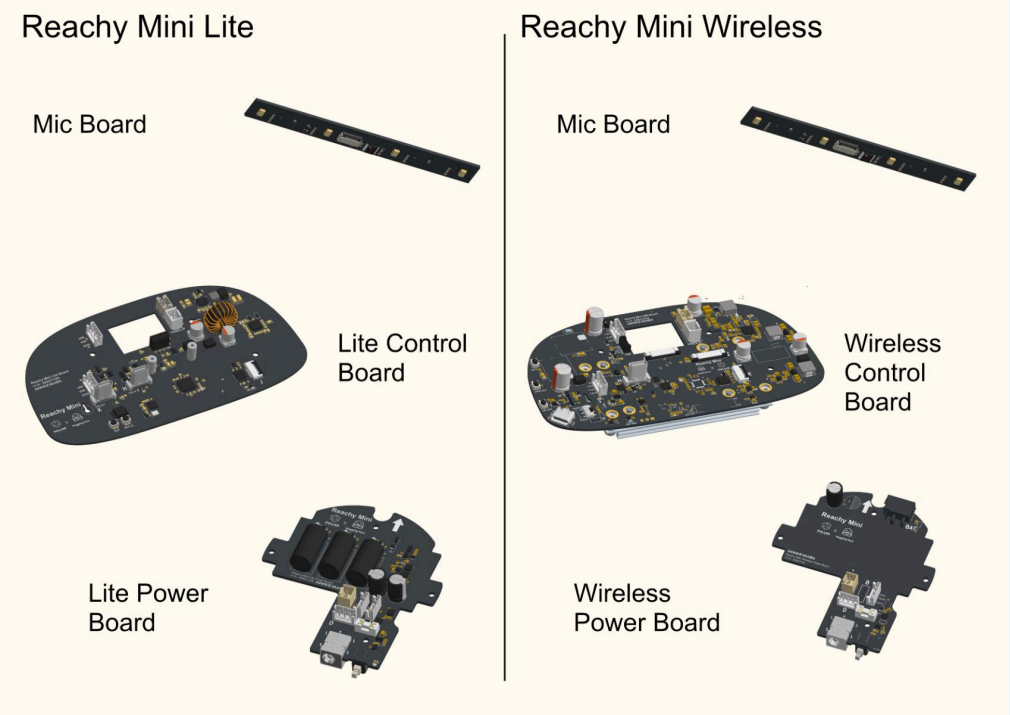
Category	Parameter	Detail
Kinematics	Total DoF	9 Degrees of Freedom

	Neck Mechanism	6-DoF Stewart Platform (Parallel Hexapod)
	Body Mechanism	1-DoF (360° Continuous Rotation)
	Antenna Mechanism	2-DoF (Independent Left/Right Control)
Sensors	Vision	12MP Wide Angle Camera (120° FoV), Autofocus
	Audio	4-Mic Array (Beamforming/DOA) + 5W Speaker
	IMU	3-Axis Accelerometer (Wireless Version Only)
Compute	Wireless Version	Raspberry Pi 4 Model B (4GB RAM)
	Lite Version	External (Requires PC/Mac via USB-C)
Power	Battery	LiFePO4 Pack (Wireless Version Only)
	Voltage	6.8V – 7.6V Input
Mechanical	Dimensions	H: 230mm - 280mm

Hardware Overview






Reachy Mini Lite
Mic Board
Lite Control Board
Lite Power Board
Reachy Mini Wireless
Mic Board
Wireless Control Board
Wireless Power Board

Applications

- **Reachy Mini Web App Hub:** 280+ Apps at https://huggingface.co/reachy-mini#/apps! Instantly access a library of community and official apps—including AI conversation and hand tracking—directly through your browser. Browse, manage, and run applications online with no complex installation required.
- **Cross-Platform Desktop App:** Reachy Mini Control is your all-in-one cross-platform dashboard (Win/Mac/Linux) featuring real-time 3D piloting, a library of 100+ expressive motions, and instant App Store access for effortless robot management and development.
- **Embodied AI Companions:** Reachy Mini transforms abstract LLMs (like GPT-4 or Llama 3) into a tangible desktop friend. It doesn't just process text; it leans in to listen, nods in agreement, and uses its animated antennas to express curiosity or joy. Whether it's a helpful assistant or a sassy gaming partner, Reachy Mini makes AI interaction feel personal, warm, and genuinely alive.
- **Multimodal Data Collection:** Stop writing complex reward functions; start teaching by showing. Reachy Mini is a research-grade data rig disguised as a cute robot. Using VR headsets or simple web controls, you can "possess" the robot to perform tasks remotely. It automatically records synchronized video, audio, and motor joint data, creating perfect datasets to train end-to-end "pixels-to-actions" models effortlessly.
- **HRI & Psychology Research:** How does a human react when a robot looks sad? Reachy Mini's 9-DoF kinematics allows researchers to explore the subtle nuances of non-verbal communication. From the angle of a head tilt to the droop of an antenna, you can precisely control emotive gestures in controlled environments, unlocking new insights into human empathy, trust, and social bonding with machines.
- **STEM & Robotics Education: Make Math Move:** Turn dry equations into dancing robots. Reachy Mini is a captivating platform that makes complex concepts tangible. Students aren't just calculating matrices; they are using inverse kinematics (IK) to make Reachy wave hello, or deploying ROS 2 navigation to track a face. It bridges the gap between textbook theory and real-world engineering, making learning Python and embedded systems undeniably fun.

Part List

Core Components / Item	Reachy Mini Wireless	Reachy Mini Lite	Remarks
Core BoardController	✅ CM4 Controller Board + Power Board	❌ (Replaced with Standard Controller)	Wireless version includes compute core
Core BoardAdapter Board	❌ None	✅ CSI to USB Board	Lite version exclusive, converts camera signal to USB
Power & BatteryBattery Pack	✅ 6.4V-2000mAh Li-ion Battery	❌ None	6.4V 2000mAh Lithium Battery
Power & BatteryPower Adapter	✅ 7.3V 5A (DC5525)	✅ 7.3V 5A (DC5525)	Both equipped with high-power adapters
CoolingCooling Fan	✅ 5V Brushless Silent Fan	❌ None	Wireless version has high compute power, needs active cooling
Vision & AudioMic Array	✅ Reachy Mini Mic Array	✅ Reachy Mini Mic Array	Both support sound localization
Vision & AudioCamera	✅ 12MP Wide Angle (Sony IMX)	✅ 12MP Wide Angle (Sony IMX)	Identical vision modules
Vision & AudioSpeaker	✅ 5W Full-Range Speaker	✅ 5W Full-Range Speaker	Identical audio output
CommunicationWiFi Antenna	✅ 1x Real Antenna (2.4/5GHz) + 2x Dummy	❌ Only 2x Dummy Antennas (Decor)	Wireless version needs external antenna for signal
MotionNeck Servos	✅ 6x XL330-M288-T	✅ 6x XL330-M288-T	Stewart Platform core power
MotionAntenna Servos	✅ 2x XL330-M077-T	✅ 2x XL330-M077-T	High-speed oscillating servos
MotionBase Servo	✅ 1x XC330-M288-PG	✅ 1x XC330-M288-PG	High-torque base rotation
CablesData Cable	✅ USB A-to-C (1.5m)	✅ USB A-to-C (1.5m)	For charging or data connection
CablesInternal Extension	✅ USB C Extension (Male-Female / 56cm)	✅ USB C Extension (Male-Female / 56cm)	Extends interface to the shell
ExtrasStickers	✅ Hugging Face / Pollen / Reachy	✅ Hugging Face / Pollen / Reachy	BOM includes three sticker types
ExtrasTools	✅ Phillips Screwdriver (Magnetic)	✅ Phillips Screwdriver (Magnetic)	For assembly and maintenance

Compliance & Logistics



HSCODE	9023009000
USHSCODE	9023000000
UPC	
EUHSCODE	8479899790
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/Reachy-Mini-Lite-Kit-p-6702.html
- Reachy Mini Assembly Guide
- Reachy Mini Hardware
- Reachy Mini LITE Assembly Guide
- Reachy Mini LITE Hardware
- Reachy Mini Datasheet

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