GATEIN TECHNOLOGY
جيت ان تكنولوجي

EMBODIED AI HUMANOID ROBOT

DOBOT LUMO L1

The Next-Generation Versatile Embodied AI Humanoid Robot

Understanding the World. Connecting with You.



Benchmark Tomorrow's Tech.

www.gateintech.com · info@gateintech.com · +201098065088

The Next-Generation Versatile Embodied AI Humanoid Robot

DOBOT LUMO L1 is a next-generation versatile embodied AI humanoid robot designed for home companionship, research & education, and commercial service applications. It delivers three key breakthroughs: **emotional intelligence, proactive physical-world assistance, and continuous learning and evolution.**



01 · WALK

Spatial Adaptability

Powered by 3D spatial understanding and autonomous mobility, DOBOT LUMO L1 can proactively move toward users and deliver companionship wherever they are — "where you are, where companionship follows."

02 · ADAPT

Role Adaptability

DOBOT LUMO L1 flexibly adapts to different roles — from an everyday companion and children's playmate to an educational partner — becoming a versatile social companion for diverse relationships.

03 · UNDERSTAND

Cognitive Adaptability

Through multimodal perception, DOBOT LUMO L1 understands user emotions and intentions via vision and voice recognition — moving beyond simply "hearing" to truly understanding and responding with empathy.

04 · GROW

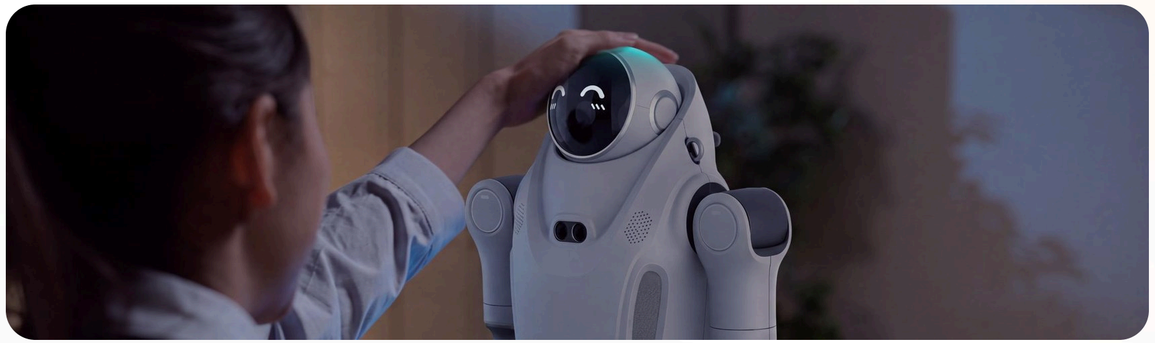
Lifelong Evolution

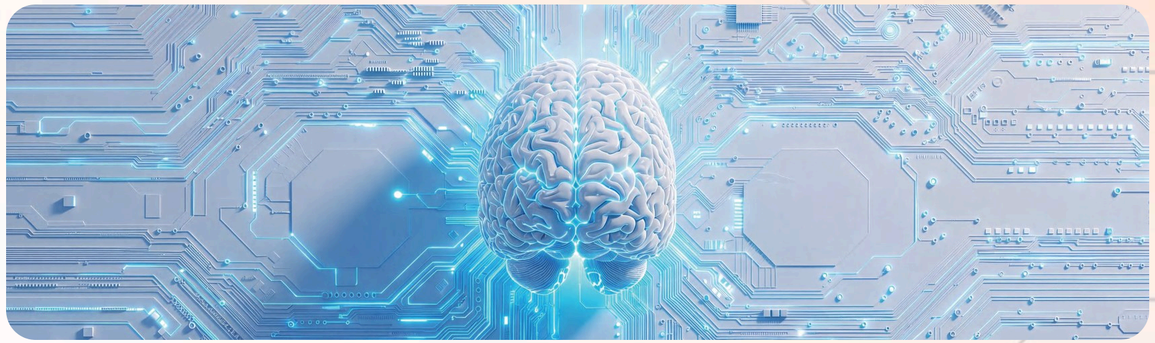
By continuously learning from real-world interactions, DOBOT LUMO L1 adapts to user habits over time and evolves into a companion that understands you better with every experience.

*Features and capabilities are subject to official release. · gateintech.com

Full-Stack Self-Developed Embodied AI Architecture

Perceive the World | **Understand Intentions** | **Continuously Evolve**





Advanced Perception | Sensing

Multimodal Emotional Intelligence: Through the fusion of vision and voice understanding, DOBOT LUMO L1 recognizes users' emotional states and responds with proactive empathy, moving beyond command-based interactions toward more natural and human-like communication.

Brain-Inspired Spatial Cognition: By building 3D semantic maps, DOBOT LUMO L1 develops a deeper understanding of its surroundings — recognizing who is speaking, where people are moving from, and what objects they are holding in real time.

Smarter Intelligence | Reasoning

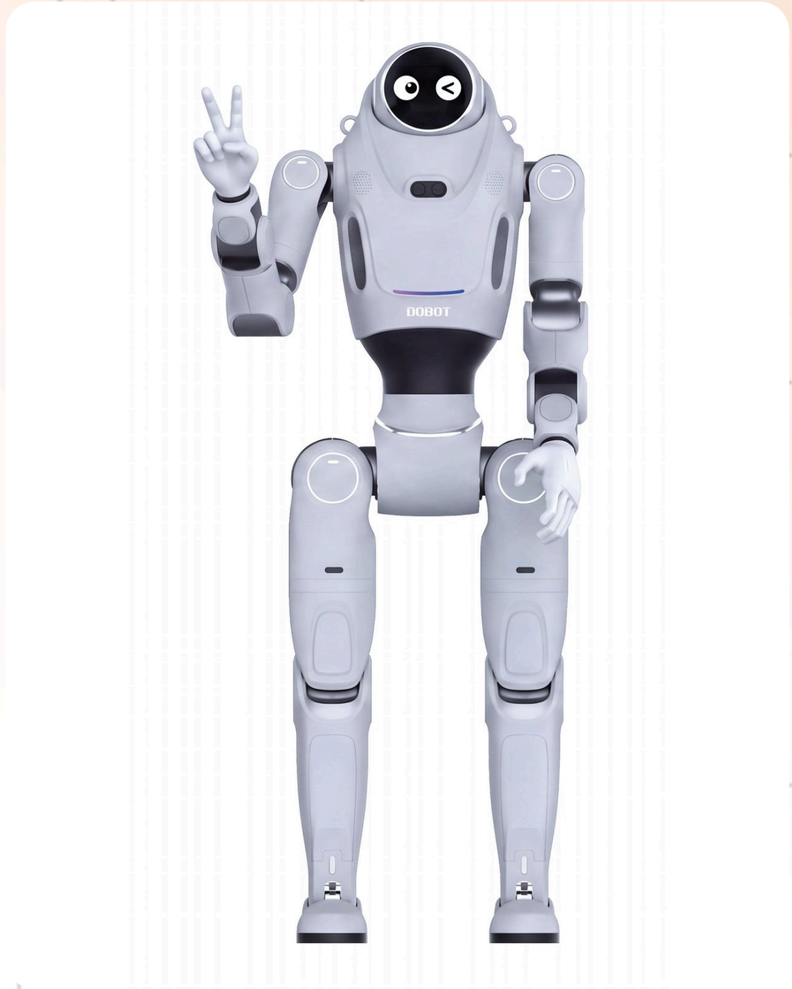
Autonomous Learning & Lifelong Evolution: Powered by DOBOT's self-developed DobotWAM Embodied AI Foundation Model, DOBOT LUMO L1 goes beyond vision-language-action (VLA) modeling by integrating 3D spatial understanding, robotic motion constraints, and real-world data feedback loops, enabling continuous learning and evolution through real-world interactions.

Long-Term Memory, Like a Family Member Who Understands You*: DOBOT LUMO L1 remembers interactions, preferences, and personal characteristics to create more natural and personalized companionship.

*Data is stored locally by default. No data will be uploaded to the cloud or used for other purposes without user consent. Users have full control over their personal data management.

Human-like Mobility | Movement

Autonomous Mobility & Expressive Interaction: With 30 degrees of freedom across the entire body, DOBOT LUMO L1 integrates high-precision navigation and obstacle avoidance systems to achieve human-like gait and advanced dynamic performance. It supports natural walking, complex dance routines, kicking, flips, and martial arts-inspired movements, enabling highly dynamic and expressive actions. Its bionic facial system features 15+ expressions, combined with head movements and body language, allowing DOBOT LUMO L1 to convey emotions more naturally and create human-like interactions.*



30
Degrees of freedom — full body

15+
Bionic facial expressions



*High-risk movements require professional assessment before activation. · gateintech.com

Applications · Home Companion



HOME

Home Companion

Companion Interaction

Enjoy interactive play, learning activities, and conversations with family members.

Family Connection

Connect with loved ones and pets remotely through LUMO's immersive first-person interaction experience.

Applications · Education & Commercial Service



Research & Education

Designed for K-12, vocational, university, and research users, DOBOT LUMO L1 provides an embodied AI learning and development platform. Supporting secondary development, it enables hands-on exploration of robotics, motion control, embodied AI algorithms, SLAM navigation, visual perception, and human-robot interaction.



Interactive Exhibition Guide

Greeting visitors, providing route guidance, introducing exhibits, answering questions, and supporting interactive event experiences.



Cultural & Entertainment Interaction

Supports dancing, handshakes, interactive games, and engaging performance experiences for audiences.



Commercial Performance

Ideal for product launches, exhibitions, shopping mall events, and promotional activities, helping brands create memorable interactive experiences.

Product Versions



Standard Edition

DOBOT LUMO L1

Max Edition

DOBOT LUMO L1

HARDWARE COMPONENTS

- Interactive Display
- Stereo RGB Camera (Max)
- 3D LiDAR (Max)
- RGB Light Strip
- Waist
- Thigh
- Foot
- Microphone Array
- Speaker
- Upper Arm
- Forearm
- Prototype Hand*
- Lower Leg

*Configuration Dependent

Package List

No.	Item	Quantity	Notes
1	Robot Unit	1	Battery not included
2	Quick Start Guide	1	Included
3	Remote Controller	1	Included
4	Battery Charger	1	Included
5	Battery	1	Packed separately

STANDARD EDITION

Rockchip RK3588

6 TOPS AI computing

MAX EDITION

NVIDIA Jetson Thor T4000

1,200 TFLOPS (FP4) · + Stereo RGB-D Camera & 3D LiDAR

Product Specifications

Category	Item	Standard Edition	Max Edition
General	Product Dimensions	1240 mm(H) x 560 mm(W) x 244 mm(D)	
	Weight (with battery)	Approx. 40.5 kg	Approx. 41 kg
	Upper + Lower Leg Length	635 mm	
	Single Arm Length	596 mm (excluding hand)	
	Total Degrees of Freedom	30	
	Head DOF	1	
	Waist DOF	3	
	Arm DOF	7	
	Leg DOF	6	
	Operating Temperature	0°C~40°C	
	Operating Time	Approx. 2 h (typical motion conditions)	

Category	Item	Standard Edition	Max Edition
Performance	Joint Maximum Torque	130Nm	
	Single Arm Payload (without gripper)	1.5 kg	
Perception System	Stereo RGB-D Camera	-	Included
	3D LiDAR	-	Included
	Head Touch Sensor	5-zone capacitive touch sensor	
Interaction Module	Audio	4-microphone array + speaker	
	Display	Interactive Display + RGB Light Strip	
Communication	Communication Method	Wi-Fi 6 (Support STA/AP), BLE 5.2	
Computing	AI Computing Power	Rockchip RK3588, 6 TOPS	NVIDIA Jetson Thor T4000; 1,200 TFLOPS (FP4)

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THANK YOU

LOOKING FORWARD TO A FRUITFUL COLLABORATION!

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www.gateintech.com · edu.gateintech.com

HQ Mohandessin, Giza, Egypt

