HOMEPAGE

A ROBOT FOR ALL

AeiROBOT

AeiROBOT, A Leap Toward the Future

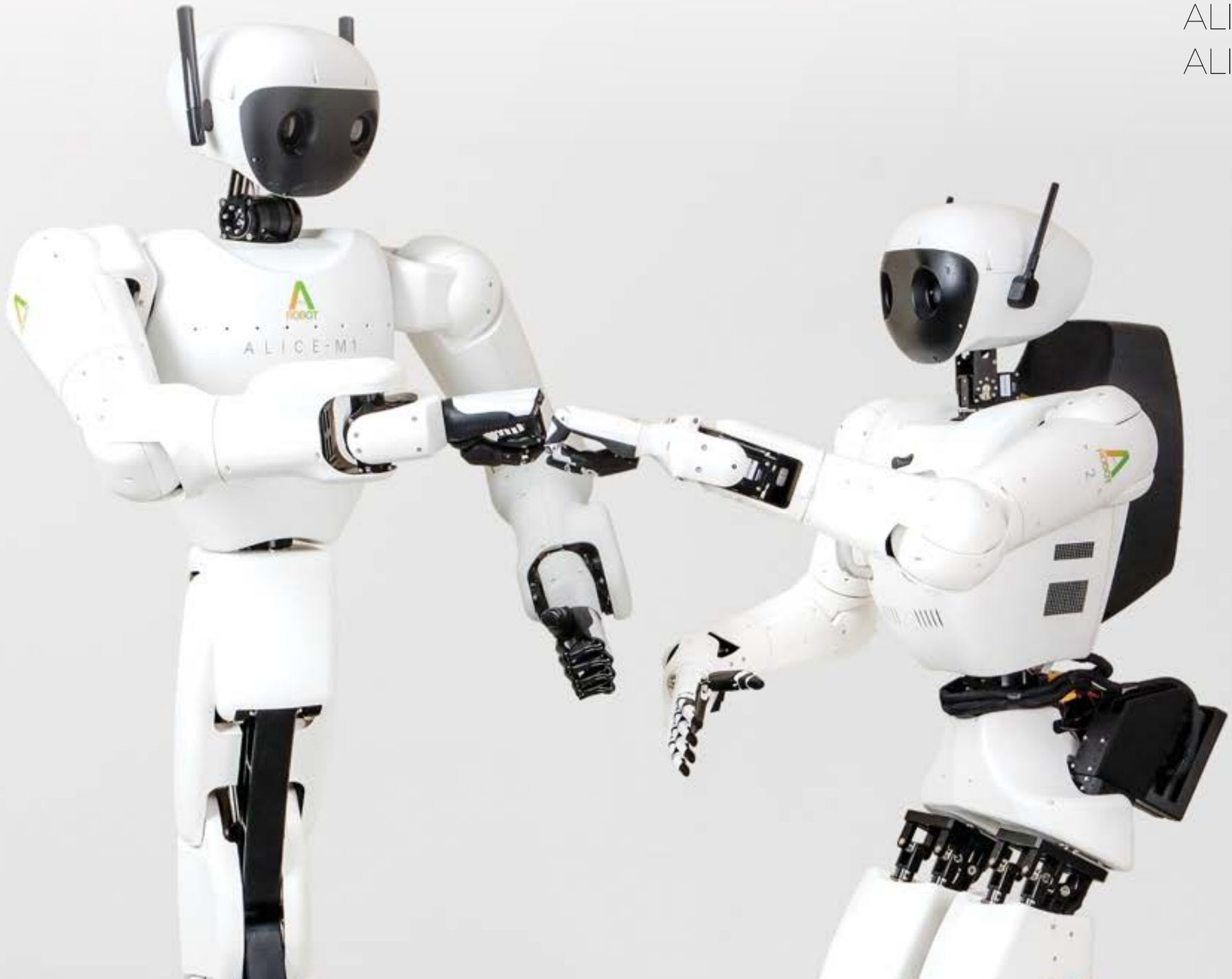
The humanoid robot sector is currently witnessing intense competition centered around the United States and China.
Faced with overwhelming technological superiority and price competitiveness from global powers, Korea faces a challenging reality. However, crises often give rise to new opportunities.
As a nation that has grown based on its manufacturing foundation, Korea is optimally positioned to establish a full-cycle humanoid robot ecosystem—from materials sourcing to market entry.
Furthermore, its manufacturing-centered industrial environment provides a distinct advantage in securing raw data, the foundation of physical AI.
With this strong foundation, we are confident in our leap toward joining the ranks of global leaders.
We hope our robots, including the humanoid ALICE series, will serve as a glimpse into the near future.

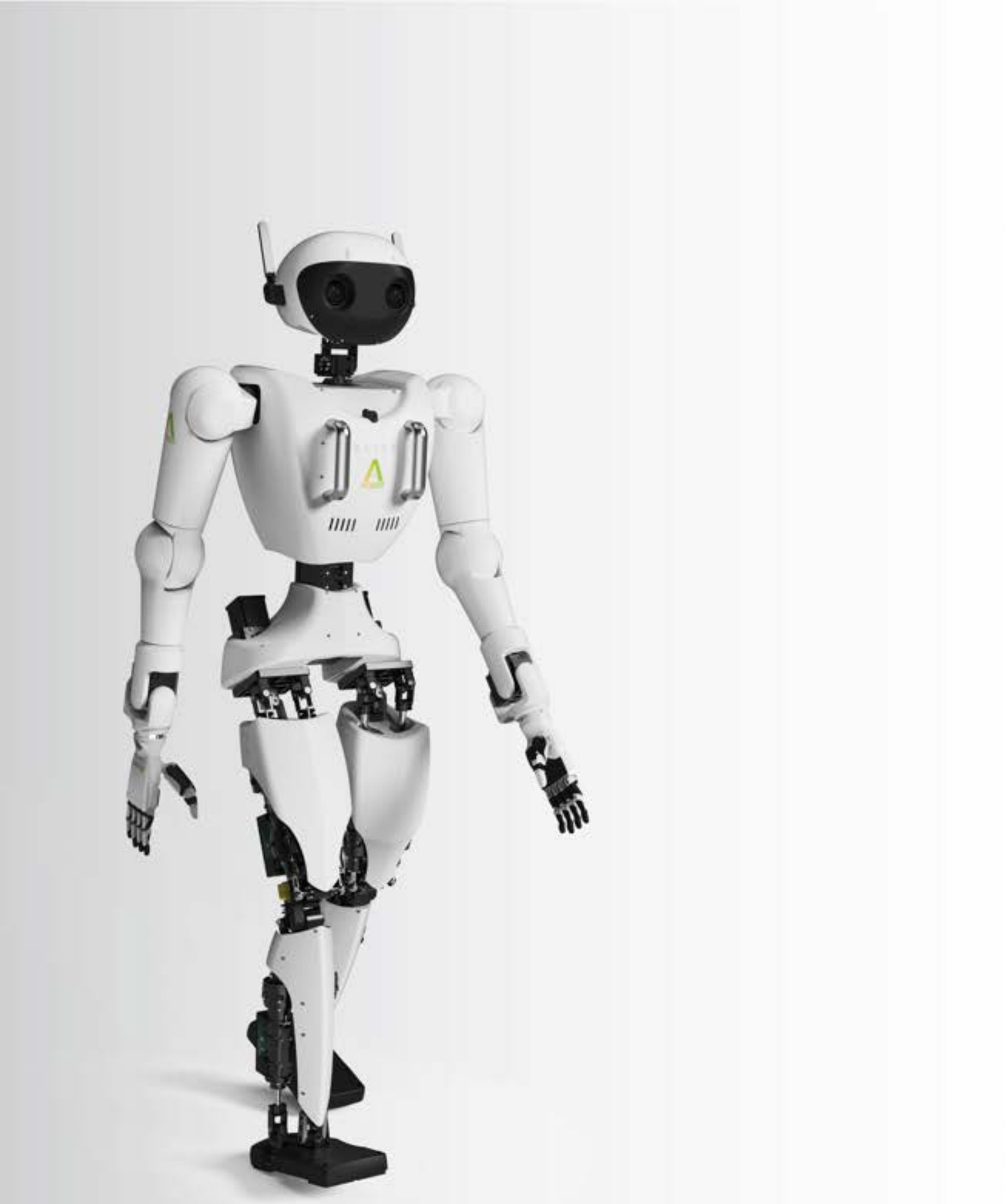
As always, AeiROBOT is committed to establishing K-robots as a formidable force on the global stage.
Thank you.

CEO Younseal Eum

ALICE

Partner in the Field
ALICE 4
ALICE M1





ALICE 4

Bipedal
Humanoid Robot
ALICE 4

ALICE 4 is an advanced and future-oriented humanoid robot platform developed to perform all human activities.

As a robot that won both the NVIDIA Award and the Okinawa Innovation Award at ‘InnoVEX 2025,’ ALICE 4 is capable of natural physical interaction with humans. It is equipped with our self-developed linear actuators, offering efficiency, durability, and precision control to deliver optimal performance in diverse environments.

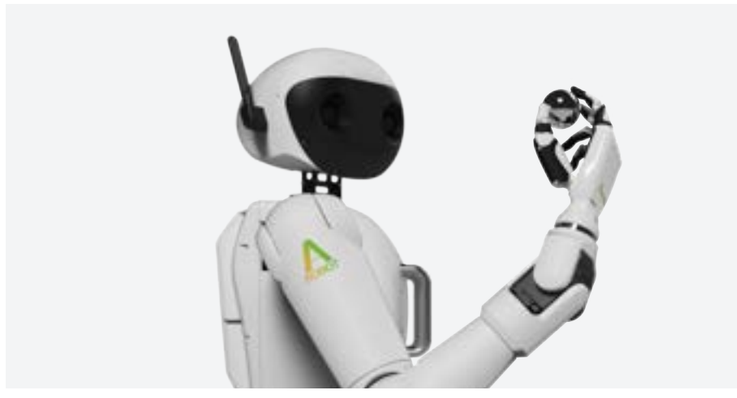
ALICE 4

On-Device AI

AI algorithms are embedded directly into the robot's onboard computer, ensuring stable performance without relying on network communication.

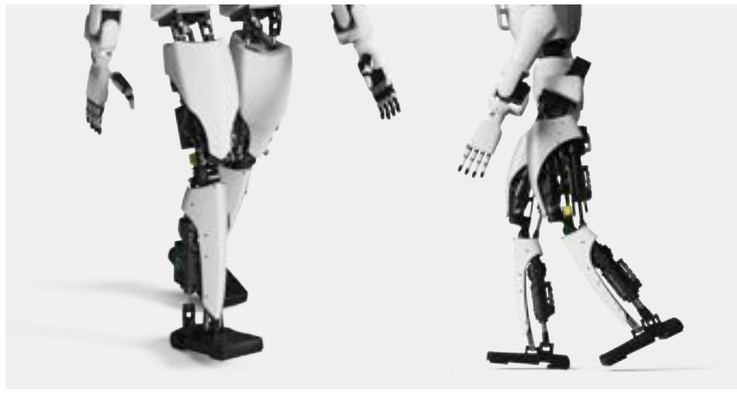
High-DOF Manipulation

With 7 DOF arms and 6 DOF hands, ALICE 4 performs delicate and complex tasks, featuring impedance control for responsive interactions with external forces.



Bipedal Locomotion

It can climb stairs and operate in narrow, irregular environments, performing tasks with stability.



BASIC SPECS

Height / Weight	1.6 m / 45 kg	Sensors	IMU , Load Cell Stereo Camera
Computing Module	GENE-RAP6 NVIDIA Orin NX	DOF	41 Head (2), Hand (6*2) Leg (6*2), Waist (1), Arm (7*2)

BASIC SPECS

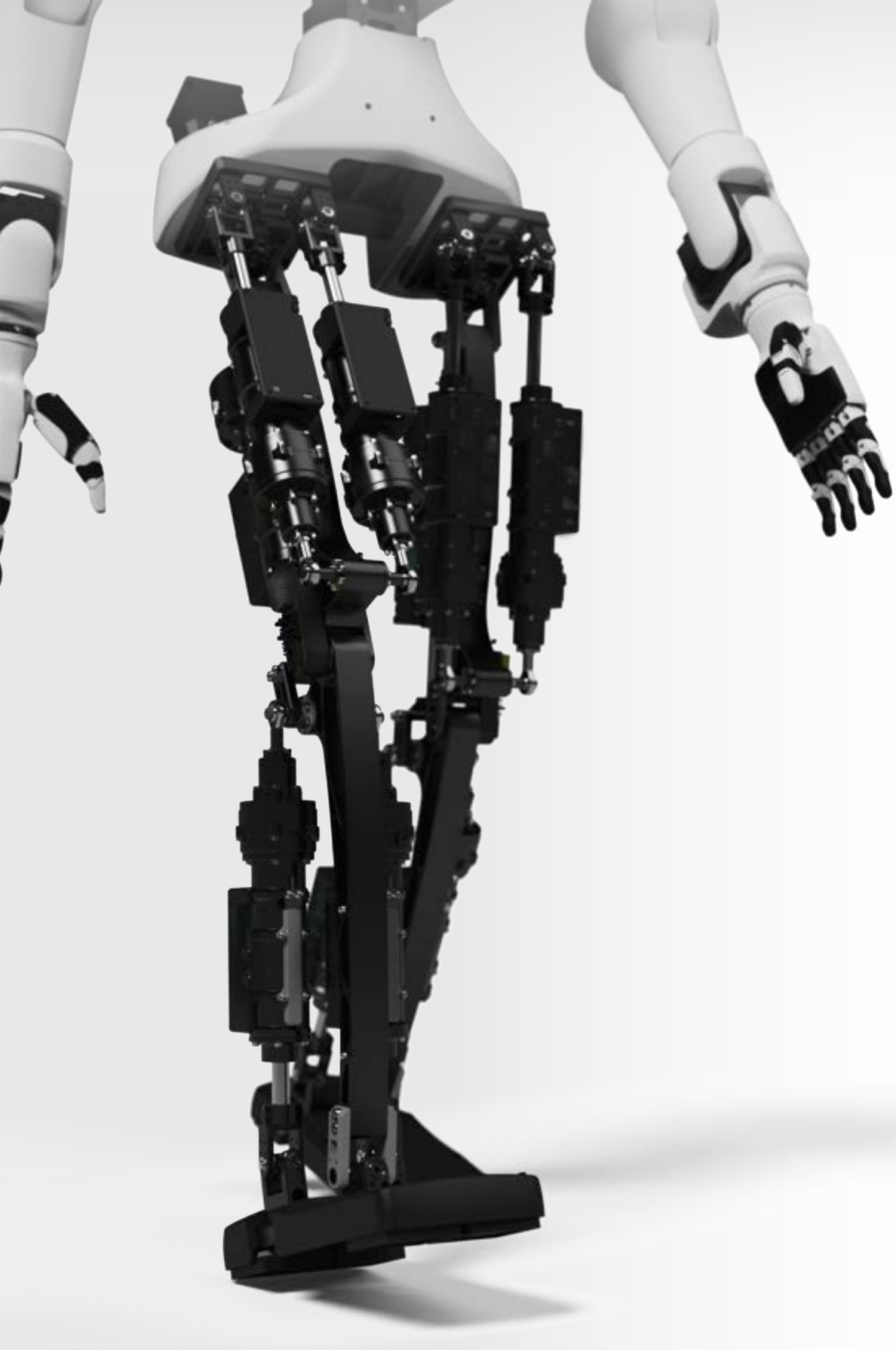
Weight	0.9 kg / 1.1 kg
Force	820 N / 1700 N
Rated Power	140 W / 270 W
Linear Speed	170 mm/s / 160 mm/s

In-house Developed Linear Actuator

Proprietary Linear Actuators for Precise Control

The linear actuator operates quietly and smoothly with a low gear reduction design and high-speed current loop control. Its simplified reduction stage and low inertia minimize response delay, ensuring even the smallest command changes are reflected instantly.
Designed for collaborative environments, it supports back-drive and active compliance control, allowing it to adapt to external forces and mitigate contact impacts.

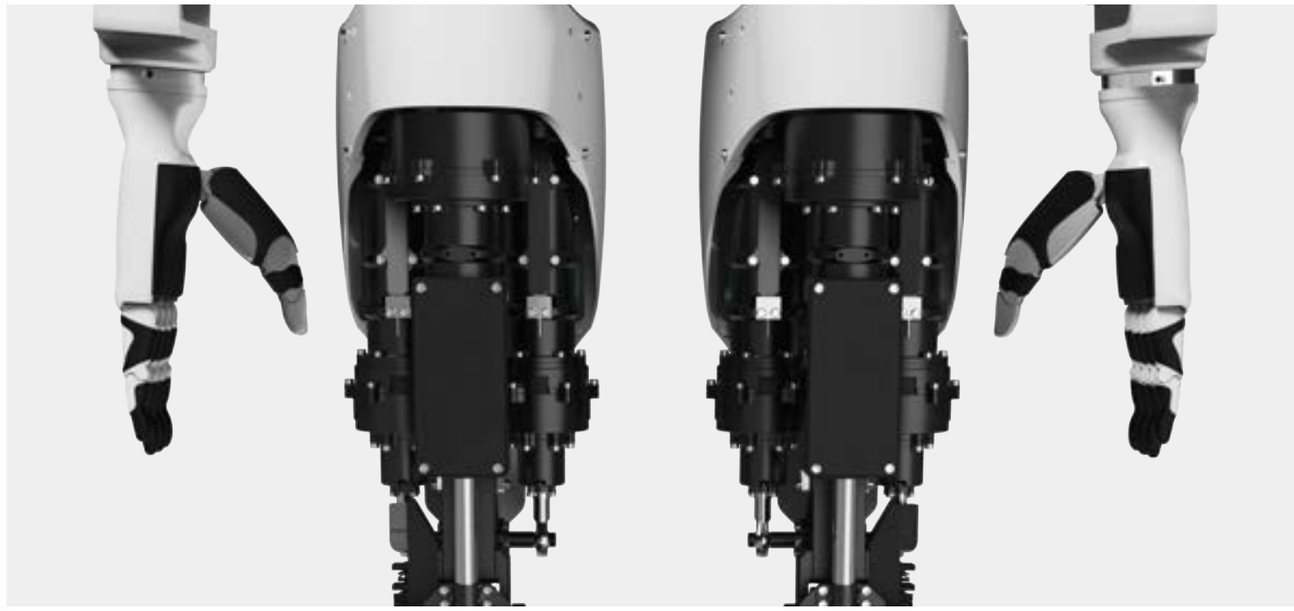
The integrated heat-sink frame and thermal management design quickly disperse heat, maintaining stable output even during extended operation.
In addition, the dedicated motor drive enables precise force control through high-speed current regulation.



Walking and Joints

Multi-link Parallel Structure Linear Actuator

ALICE 4's legs adopt a multi-link parallel structure with multiple cooperating linear actuators, providing resilience to external forces. All actuators are vertically aligned with the ground to evenly distribute reaction forces and ensure stable walking. Despite the complexity of this control architecture, AeiROBOT succeeded using our proprietary frameworks and accumulated know-how.



SLIP Model-Based Bipedal Control

Walking is achieved through Kino-Dynamics analysis, considering both position and force for impedance control. We implement the SLIP (Spring-Loaded Inverted Pendulum) model, ideal for running, with a target walking speed of 3 m/s.

Reinforcement learning and imitation learning are underway via simulation, combined with whole-body control and model predictive control to ensure fast and stable walking.

ALICE-M1

Mobile
Humanoid Robot
ALICE M1

ALICE M1 is an innovative mobile humanoid robot platform optimized for manufacturing environments.

It features 7 DOF robotic arms and a vertically adjustable dual-link waist,
enabling precise operations even in confined spaces, and handling work heights from 1.3m to 1.8m.
With high degrees of freedom, mobility, and autonomous control, ALICE M1 is an ideal partner
to replace repetitive human tasks while enhancing productivity and safety.

ALICE M1

BASIC SPECS

Height / Weight	1.3 - 1.8 m / 97 kg	Sensors	IMU , Stereo Camera 3D Lidar , Laser Sensor
Computing Module	AFE-R360 NVIDIA AGX Orin	DOF	31 Head (2), Hand (6*2) Waist (3), Arm (7*2)

High-DOF Manipulation

7 DOF arms and 6 DOF hands support human-like versatility in task execution.

Variable Height Structure

Parallel-link waist allows height adjustment between 1.3m and 1.8m for stable multi-height operations.

Mobile Platform

Equipped with multiple sensors for obstacle avoidance, SLAM, and navigation to enable stable autonomous movement.

AiMY

Welcome Robot
AiMY

Ai Meet You

AiMY is a self-driving indoor guidance robot that offers information to customers. What sets AIME apart is its detailed HRI capabilities that genuinely satisfy customers. Its ability to make eye contact and interact naturally makes users feel more respected, delivering a positive experience that benefits clients' businesses.

AiMY

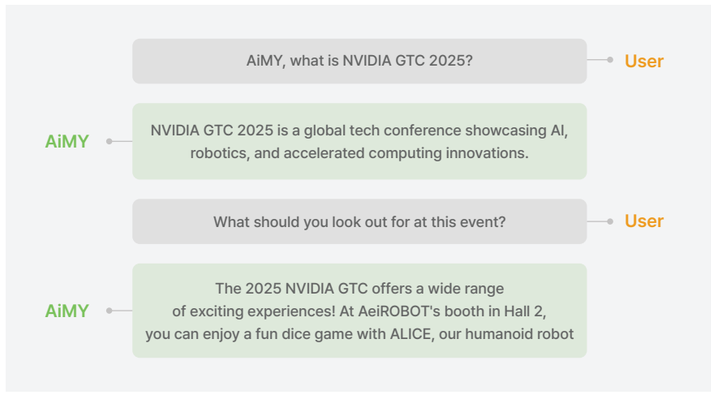
- [x] Mobile Module
- [x] GPU Upgrade
- [ ] Emotion Expression Module
- [x] Built-in Hands
- [x] LLM Integration
- [x] Service Tablet
- [ ] Voice Output
- [ ] Specific Action Execution
- [x] Automatic Gesture Generation
- [x] Customizable Design
- [ ] Others

HRI Integration
(Human Robot Interaction)

Eye contact and conversational abilities, with auto-generated gestures for natural listening postures.

LLM Integration
(Large Language Model)

Supports natural conversation and fast, accurate information retrieval via LLMs like ChatGPT.



BASIC SPECS

Height / Weight	1.5 m / 44 kg	Sensors	IMU , Stereo Camera , 3D Lidar IR Sensor , Laser Sensor
Computing Module	AMD Ryzen 5 7600 RTX 4060 Ti	DOF	23 Head (2), Hand (6*2) Arm (7*2), Waist (1)
Charging / Running	4 hour / 8 hour	Display	Head: 8 inch TFT LCD Body: 13.3 inch TFT LCD Touch Display

Customizable Functionality

Users can add desired modules to tailor the base robot to specific service needs.

*Option: Attachable Hand (6DOF)

EDIE

Companion Robot
EDIE

EDIE is a companion robot designed to enhance safe and healthy living for users, with a cute appearance and emotional AI.

EDIE 8 features upgraded AI that recognizes facial expressions, social cues, and crisis situations to respond accordingly.
This builds emotional attachment and provides comfort and stability.

EDIE 8

Reinforcement Learning

Learns and evolves through long-term interactions, providing personalized services.

Advanced AI Recognition

Recognizes emotions, gestures, and can call for help in dangerous situations.

Proven Emotional HRI

fMRI studies from Catholic University's cognitive science team showed positive emotional bonding with EDIE.

BASIC SPECS

Size	230(W) x 230(D) x 177(H) mm	Sensors	Wide FOV Camera Laser Sensor , IMU , FSR
Computing Module	RK 3588	DOF	4 Leg (2), Ear(2)
Charging / Running	3 hour / 8 hour		
AI Processor	HAILO-8 , Lightspeeur 2803S	Display	5″ Round LCD Display

Intelligent Humanoid Robots: The New Partners of Industry

AI is moving beyond screens into the real world through humanoid robots, the most complete solution for real-world task execution.
As AI evolves into Physical AI via humanoids, the 2025 debut of Robot Foundation Models (RFMs) accelerates this trend.
Fierce global competition is underway to deploy RFM-powered humanoids in industry.
AeiROBOT is at the forefront, showcasing the mobile humanoid ALICE M1 and the rugged bipedal ALICE 4
—both designed to deliver cost-effectiveness and productivity in manufacturing.

Our vision is to see humanoid robots actively working alongside human workers in Korea's industrial fields
—redefining productivity, safety, and the future of manufacturing.

CTO Jeakweon Han

AeiROBOT

AeiROBOT Co.,Ltd | # 405 Business Incubator, 55 Hanyangdaehak-ro,
Sangnok-gu, Ansan-si, Gyeonggi-do, Republic of Korea
Homepage : www.arobot4all.com
Tel : (+82) 031-400-3824 | Email : arobotmaster@arobot4all.com