



# RAION ROBOTICS

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## Unrivaled power Limitless innovation

Raion Robotics has independently developed core robot component technology, combining precision electric actuators with an AI-based adaptive walking algorithm. Through this, it achieves excellent balance and agile mobility even on complex terrain.

### — RAIBO2, Innovation for Optimized Performance

RAIBO2 is a world-class quadruped robot, born at the intersection of biomechanical inspiration and industrial precision engineering.

Raion Robotics has achieved a remarkable technological milestone by proving the stability and durability of its technology through real-world testing beyond the laboratory verification stage, drawing significant attention from the global robotics industry.

- ▶ In-house development of all core component technology
- ▶ Exceptional performance in walking speed, stability, and balance
- ▶ Proven performance (world's first to complete a marathon)



# Intelligent locomotion

## : Stability Beyond Limits

- Adaptive walking algorithms and precision joint control enable the robot to stably navigate unstable terrain, stairs, steep slopes, and road curbs while on its missions.
- Deep reinforcement learning-based advanced control technology allows dynamic walking speeds of up to 6m/s.
- Analyzing its surroundings in real-time, the robot autonomously finds the optimal path to its destination, avoiding obstacles and traversing rough terrain.



# Long endurance: World's only Robot Marathoner

RAIBO2 is the only robot to have ever completed a full marathon course (42.195km) on a single battery charge. We made this possible by combining our efficient locomotion technology, which adapts to diverse terrains, with an optimized hardware design. The result is a robot that doesn't just walk—it sets world records, proving its incredible efficiency and reliability in a way no other robot can.



▲ Capable of full marathon (42.195km) without a recharge



8 hours 47km walking  
Charging time : hours



In-house development  
All key components  
(Securing price competitiveness)



Max speed 6m/s



Walking stability  
Excellent balancing



High energy efficiency  
Low-noise operation



Fanless Design - Low Noise Drive  
(Enhance durability and stability)



# Specification

Weight	Payload	Speed	Battery Time	Availability
<b>42 kg</b>	<b>15 kg</b>	<b>6m/s</b>	<b>8 hours</b>	<b>2024 Q4</b>
Maximum 21.6km/h				
(*) Guaranteed under certain conditions				

- Characteristics**      Hollow-Shaft actuators      Fanless design      High performance PC
- Applications**      Inspection      surveillance
- Encryption**      Image encryption upon request

