

MagicBot Z1

魔法原子双足人形机器人

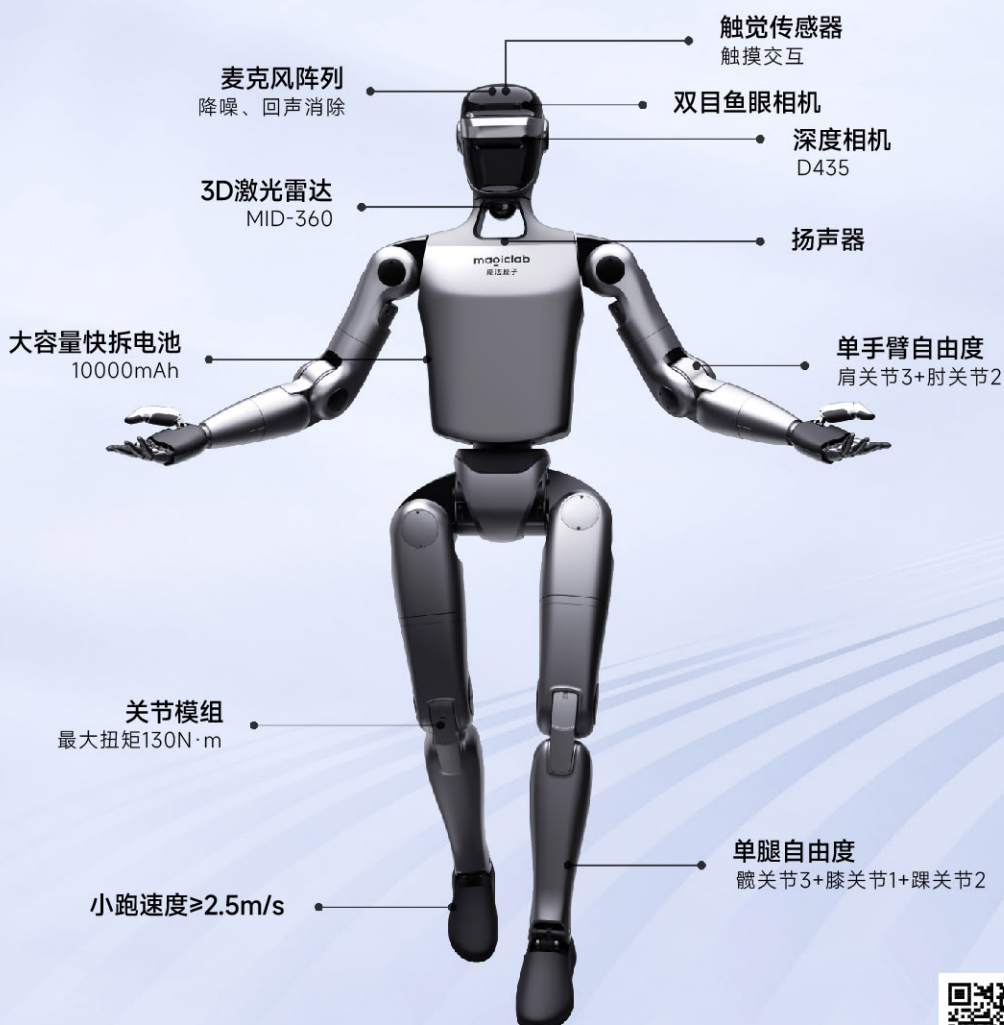
定义人形机器人产品价值新维度！

高性能高可靠本体

- **顶尖运动性能**：50个仿生关节、320°超大活动角度、130N·m强劲扭矩，能轻松完成连续倒地起身等高难度动作，为高动态运动研发/应用提供强力支撑。
- **工业级耐用品质**：航空铝合金+工程塑料机身，抗摔耐撞；智能风冷散热系统，可持续高强度工作；减少维护成本，让您无需分心，专注核心任务。

开放AI生态系统

- **极速开发，拟人升级**：多源数据库赋能，20分钟掌握新动作，训练效率与拟人表现双提升。
- **硬核扩展，自由定制**：算力包/7自由度手臂/灵巧手等选装，按需配置，解锁无限创新可能。



参数介绍

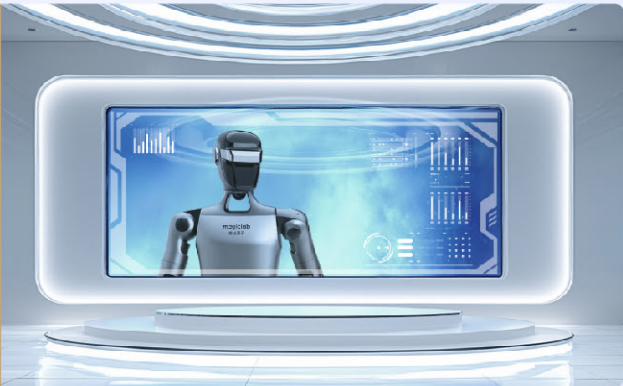
规格参数	Z1 开发版	头部Z轴关节活动范围	±40°
高宽厚(站立)	1369*422*200mm	腰部Z轴关节活动范围	±160°
带电池重量	约40kg+	膝关节关节活动范围	0-152°
总自由度(关节数)	24 - 50	髋关节活动范围	P±160°、R-30~+110°、Y±160°
头部自由度	1	基础算力	8核高性能CPU
腰部自由度	1	高算力模组	可选配
单腿自由度	6	感知传感器	3D激光雷达+深度相机+双目鱼眼相机+头部触觉传感器
单手臂自由度	5+ (可加选2个手腕自由度)	智能电池(快拆)	10000mAh
灵巧手自由度	可选配11自由度触觉灵巧手	OTA	支持
膝关节最大扭矩*	130N·m	二次开发	有
手臂最大负载*	3kg	展示动作	拟人行走、拟人奔跑、倒地起身
小腿+大腿长度	0.6m	语音交互	语音指令、Chatbots
手臂臂展	约0.5m	高级功能	选配导览功能

*最大扭矩、手臂最大载荷、续航时间等为实验室环境下测得。
*以上参数在不同业务场景和机型配置下可能存在差异，请以实际使用体验为准。

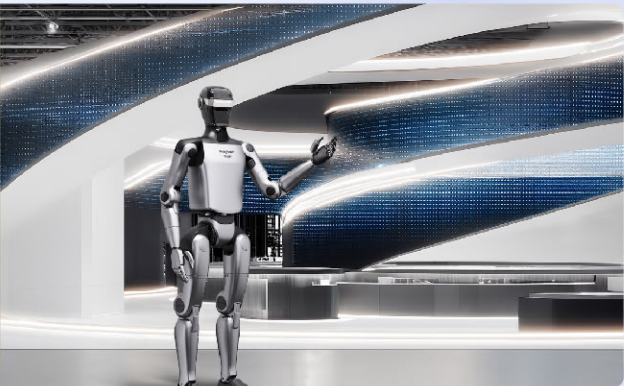
丰富场景落地应用

- 灵动纵横, 场景全能：拥有高动态运动与全地形平衡能力，轻松驾驭科研教育、商演表演等多元场景。
- 智能交互, 自主识途：360°感知+自主导航，支持多模态对话，适配文旅导览、家庭陪伴等场景。
- 场景无界, 开拓无限：支持客户拓展开发，我们始终是您最强后盾。

科研教育



展览文旅



商演文娱



家庭陪伴



MagicBot Z1

MagicLab's Bipedal Humanoid Robot

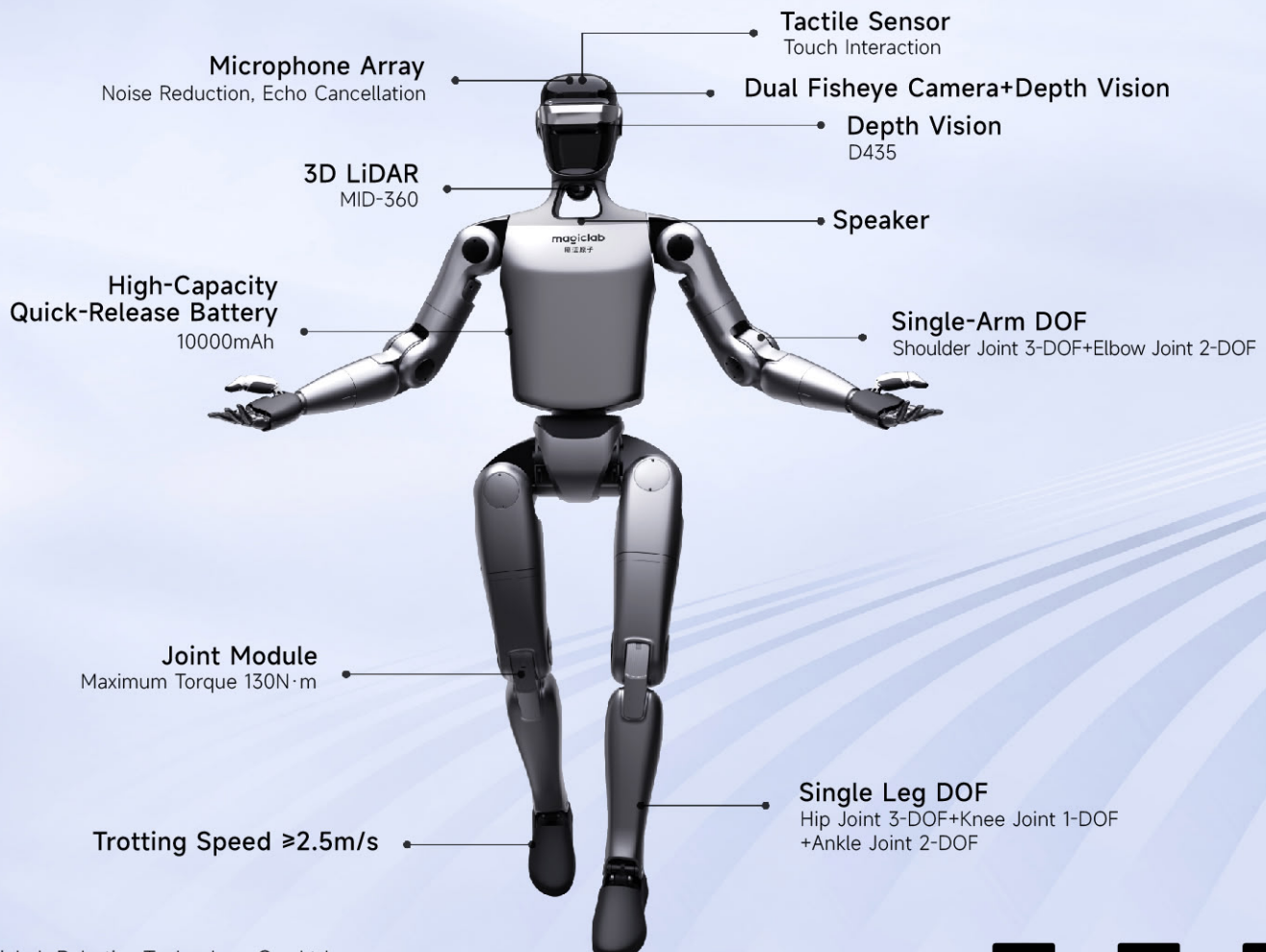
Redefining the Value Dimensions of Humanoid Robots!

High-Performance & High-Reliability Robot

- **Top Mobility Performance:** 50 bio-inspired joints, 320° ultra-wide motion range and 130N·m high joint torque. Z1 is capable of executing difficult maneuvers like consecutive fall-recovery with ease, delivering robust support for high-dynamic R&D and applications.
- **Industrial-Grade Durability:** Aerospace-grade aluminum alloy + engineering plastic body for fall and crash resistance. Intelligent air-cooling system enables sustained high-intensity operation. Minimized maintenance cost to ensure undivided focus on core missions.

Open AI Ecosystem

- **Rapid Development and Human-like Evolution:** Powered by multi-source databases, Z1 can master new movements in 20 minutes with dual enhancements in training efficiency and anthropomorphic performance.
- **Hardcore Expandability and Free Customization:** Optional modules including computing power packs/7-DOF arms/dexterous hands, enabling on-demand configuration to unlock limitless innovation possibilities.



Parameter Introduction

Specifications	Z1 Developer Edition	Head Z-axis range of motion	±40°
Height/Width/Depth (standing)	1369*422*200mm	Waist Z-axis range of motion	±160°
Weight (with battery)	40kg+	Knee joint range of motion	0-152°
Total DOF (joint motors)	24 - 50	Hip joint range of motion	P±160°、R-30~+110°、Y±160°
Head DOF	1	Base Computing Unit	8-Core High-Performance CPU
Waist DOF	1	High-Performance Computing Module	Optional
Single Leg DOF	6	Perception Sensor	3D LiDAR+Depth Vision+Dual Fisheye Camera +Head Tactile Sensor
Single Arm DOF	5+ (Optional 2 Arm DOF)	Smart Battery (Quick-Release)	10000mAh
Dexterous Hand DOF	Optional 11-DOF Tactile Dexterous Hand	OTA	Support
Max Knee Torque*	130N·m	Secondary Development Kit	Support
Max Arm Payload*	3kg	Motion Demonstration	Anthropomorphic Walking, Anthropomorphic Running and Automatic Fall Recovery
Lower Leg+Thigh Length	0.6m	Voice Interaction	Voice Command、Chatbots
Arm Span	0.5m	Advanced Function	Exhibition Guide

*Maximum torque, arm payload, and endurance time are measured under laboratory conditions.
*Specifications may vary across different application scenarios and hardware configurations. Actual performance shall prevail.

Diverse Scenario Applications Deployment

- **Agile Mobility, Universal Scene Compatibility:** With high-dynamic mobility and all-terrain balance,Z1 effortlessly adapts to diverse scenarios from STEM education to commercial performances.
- **Intelligent Interaction and Autonomous Navigation:** With 360° perception and self-navigation capabilities,Z1 features multimodal dialogue for various scenarios including cultural tourism guidance and home companionship.
- **Boundless Scenarios and Infinite Possibilities:** With full support for customer development,we remain your most reliable technological partner.

