

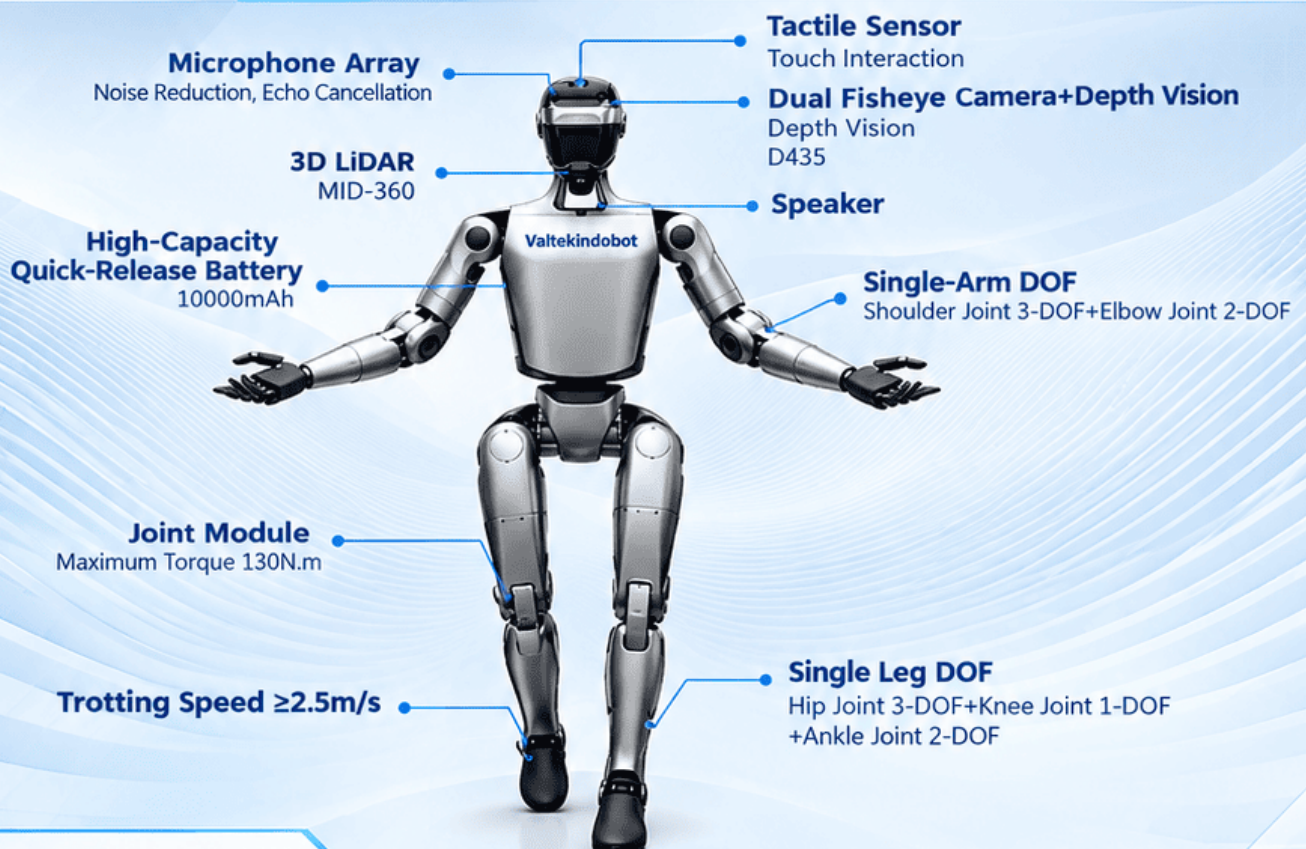
Redefining the Value Dimensions of Humanoid Robots!

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.



Note :

Due to keeping innovation, the specification and Machine pictures or color are subject to alteration without notice!



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	±60°
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.



Scientific Research and Education



Exhibition and Cultural Tourism



Commercial Show and Entertainment



Family Companion



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