

# Embodied Intelligence Robot — E1

Created by NOETIX

The NOETIX-E series features self-developed motion control algorithms, adapts to complex terrains, supports dexterous hands and other accessories, and enables secondary development across diverse scenarios.



# Features

The E-series bipedal humanoid robot features high-performance force-controlled joints with high torque density and bandwidth, delivering a peak torque of 150 N·m. With a clean, compact design, it stands 1.36 m tall and weighs around 36 kg. Equipped with quick-swap, high-discharge lithium-ion batteries, it offers over 2 hours of runtime. Powered by Noetix self-developed reinforcement learning motion control algorithm, it achieves stable locomotion across various terrains and supports humanoid running, with a top speed exceeding 3.5 m/s.

## Product Advantages

### Built for Embodied Intelligence

Supports dexterous manipulation and intelligent interaction; capable of dynamic motions including running, dancing, and jumping.

### Secondary Development Interface

The EI EDU version offers an open SDK, supporting speed/motion commands and custom joint-level algorithm control.

### Excellent product stability

Built with an aluminum alloy frame and high-strength plastic shell, it remains stable after dozens of drop tests, reaching industry-leading standards.

### Excellent price/performance ratio

Self-developed body with highly localized components; hardware cost and quality are strictly controlled for high performance at low cost.



# Key Parameters

Universal·Flexible·Freedom

**23~30** DoF    **1~2** h    **1.2** m/s

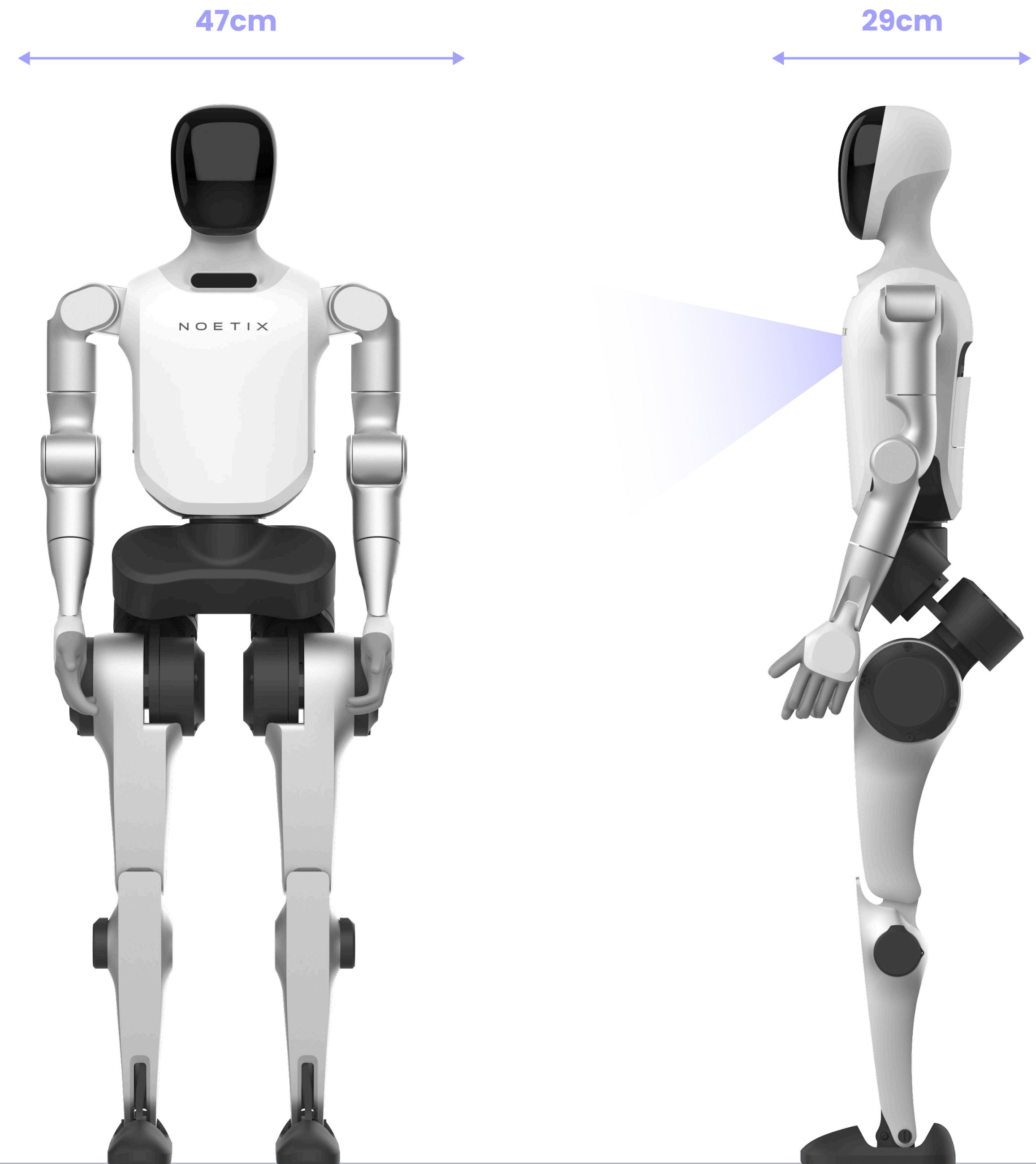
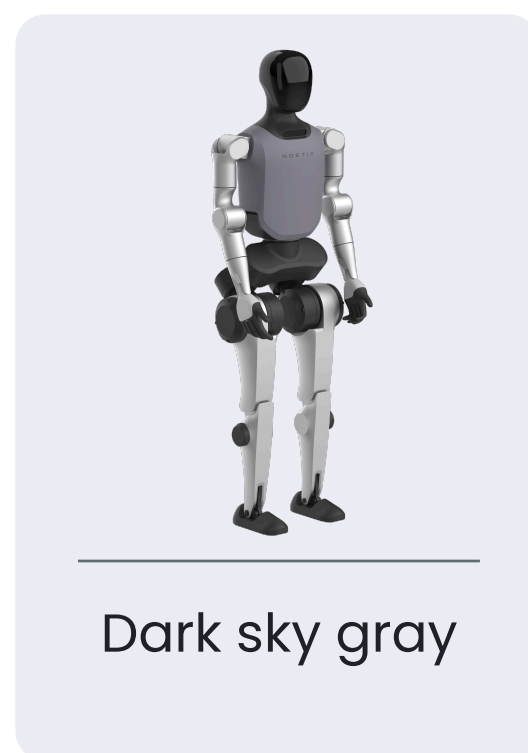
Total DoF

Battery Capacity

Standard Speed

## Multiple CMF Options Available

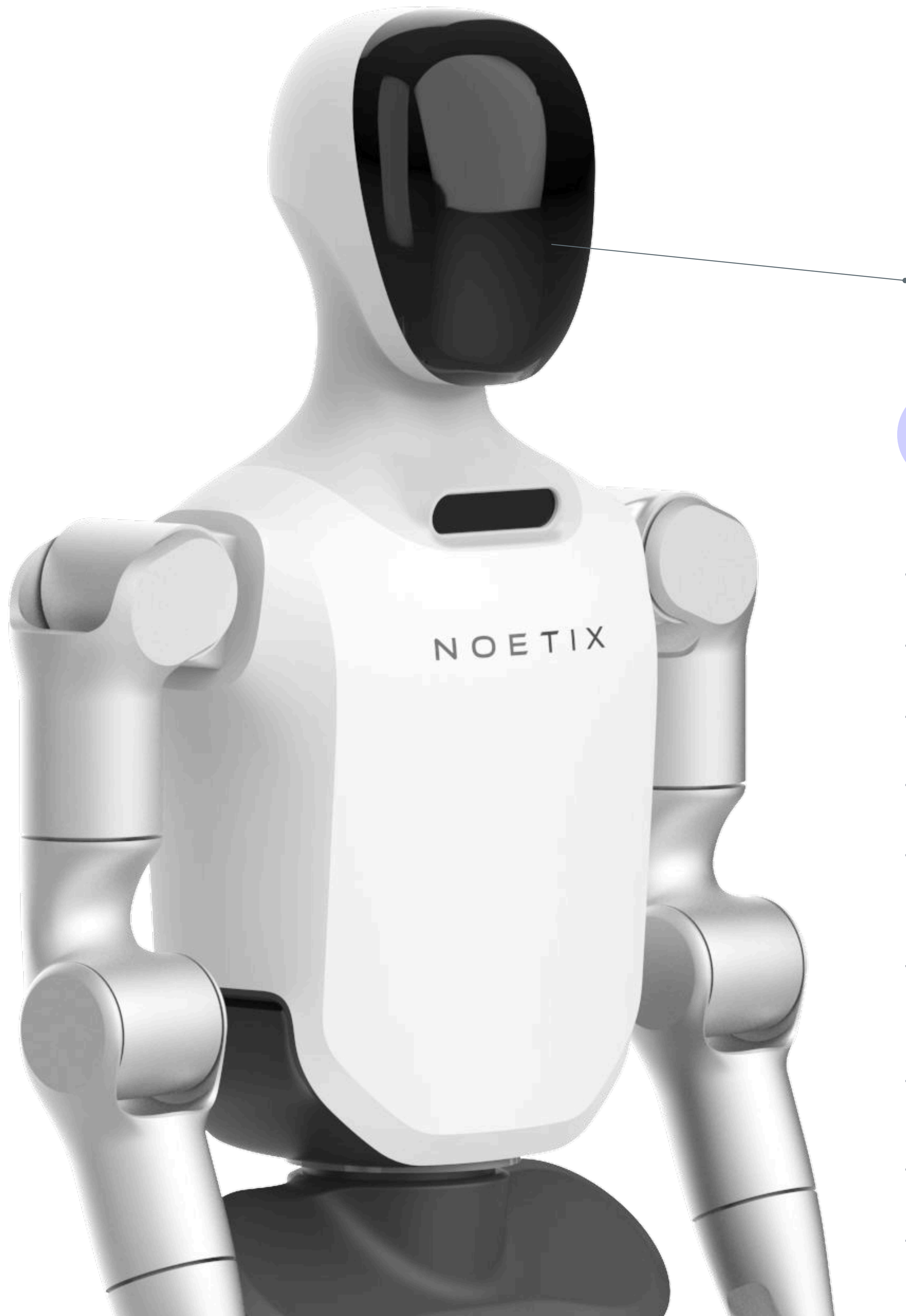
Aluminum Alloy Frame with Plastic Casing



Product Size: 136cm\*47cm\*29cm

Weight about: 36kg

\*Product specifications are subject to the actual product



# Product Performance and Configuration

## 23 DoF for the whole body

Equipped with voice module, supporting the development of large language model, multi-modal large model, etc., which can realize rich voice interaction and human-computer interaction function development scenarios.

### Function

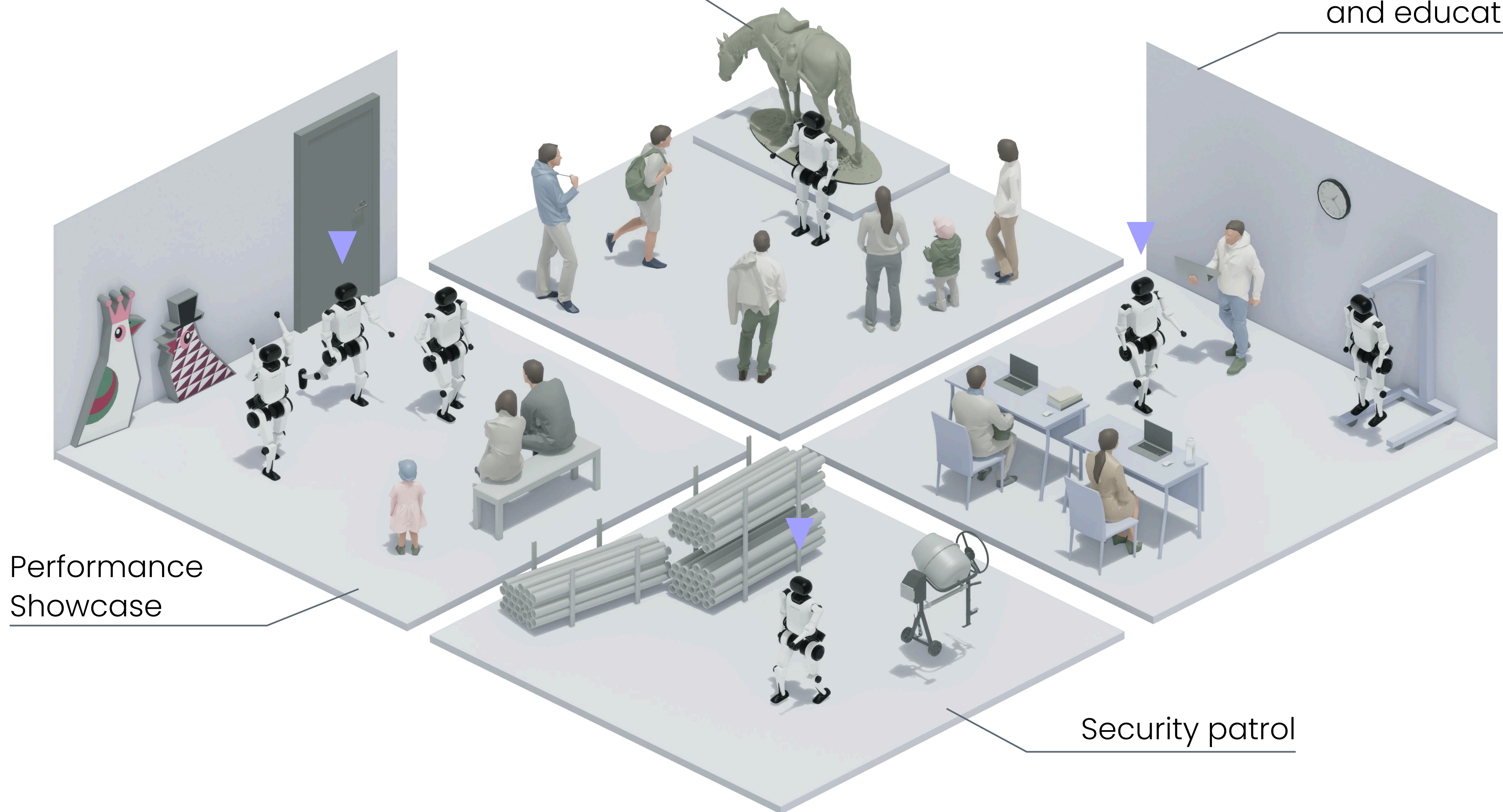
### Parameter

Maximum Joint Torque	150 N·m
Single Leg	6 DoF
Single Arm	5 DoF/9 DoF (optional)
Basic computing power	6 TOPS (EDU Edition 6+67 TOPS)
Perception Sensors	Depth Camera、IMU (EDU version 6+67 TOPS)
CPU	RK3588s with 4-core Cortex-A76 + 4-core Cortex-A55 at up to 2.4GHz
GPU	The EDU version is equipped with NVIDIA Jetson Orin Nano Super
Smart Battery	48v 9Ah
Secondary Development	Open SDK interface for EDU version

# Application Scenario

Reception and  
guided tours

Scientific research  
and education





WeChat Swipe  
Get more information and tips  
[noetixrobotics.com](http://noetixrobotics.com)