

Booster T1

Made for Developers





Lightweight Flexible Durable



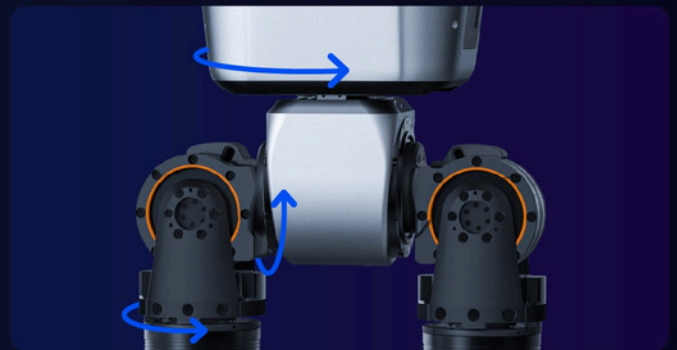
Height about 1.2m
Weight about 30kg

Easy to lift by a single person



**Extra large joint
movement space**

Capable of performing actions
challenging for humans



**Wear-resistant and
anti-fall**

By using topology optimization to improve
structural strength, along with high-strength
metals and engineering plastics to become
fall resistant



Rich Mobility Capabilities



Walking Abilities

Forward | Backward | Lateral
Rotational | Omni-directional



Push Recovery and Fall Recovery

Withstands 15 N·s impact
Active fall | Get up



Soccer Skills

Autonomous soccer game
Dribble and high-kick
Throw-in



Motion Library

Push-ups
Kung-fu
Dance



Edge LLM Support

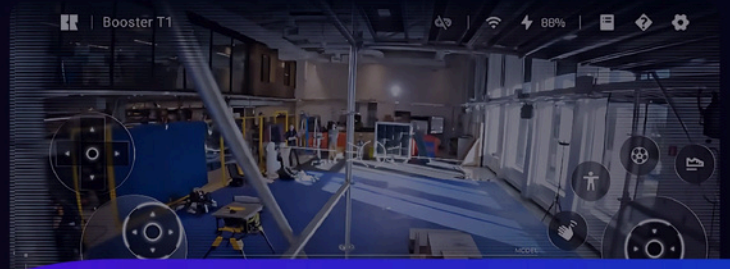
Can easily deploy edge LLM models and achieve various capabilities, including long text, retrieval-augmented generation (RAG), task execution etc.



Computing Unit Specification

Computing Power	Nvidia AGX Orin, provides 200 TOPS AI performance
Network	1000M Wired, Wifi 6, 5G (Optional)
Video	Depth Camera
Audio	Speaker, Microphone

Developer Friendly



API

High-level motion interface

Low-level hardware interface

Status feedback interface

Popular simulation environments support

Isaac Sim

Mujoco

Webots

Easily achieve multimodal interaction

Optional edge LLM support

Supports TTS (Text-to-Speech)
ASR (Automatic Speech Recognition)

Supports recognition algorithms like Yolo

ROS support

Compatible with ROS2 ecosystem

APP support

Quickly operate the robot and
view its status

Booster T1

Parameter

BOOSTER ROBOTICS

Voice Module

Circular 6-Microphone Array + Speaker

Head DoFs

2

Vision Module

Depth Camera

Computing Power

Provides 200 TOPS AI performance

Single Arm DoFs

4 (Extensible)

Battery

2h (Walking)
4h (Standing)

Waist DoFs

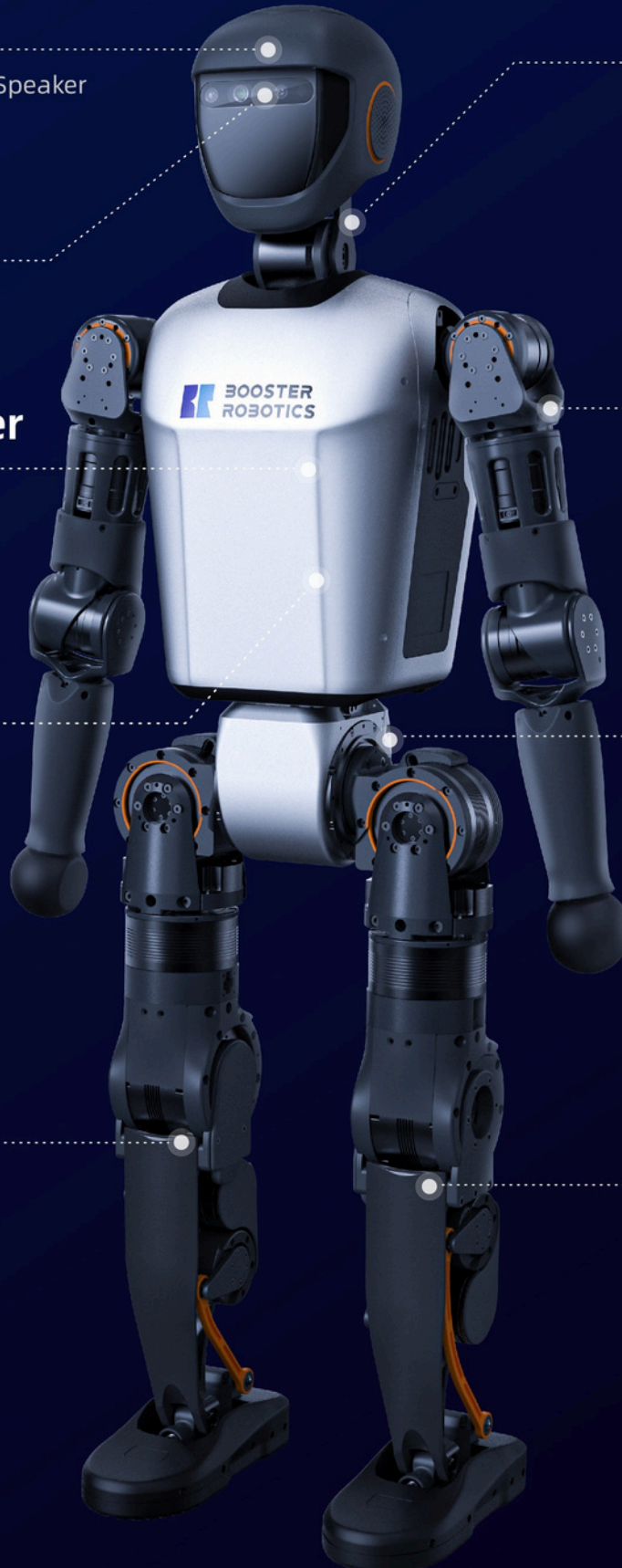
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Joint

Peak torque of 130 N.m
Dual encoders

Single Leg DoFs

6



Specification	Booster T1
Size	118×47×23cm
Calf+Thigh Length	57cm
Arm Span	45cm
Weight	About 30 kg
Total Degrees of Freedom	23
Single Leg DoFs	6
Waist DoFs	1
Single Arm DoFs	4 (Extensible)
Head DoFs	2
Max Torque of Knee Joint	130N.m
Joint Encoder	Dual Encoder
End Effector	Gripper (Optional)
Joint Movement Space	Waist Joint: $\pm 58^{\circ}$ Hip Joint: $P\pm 118^{\circ}$ 、 $R-21^{\circ}\sim +88^{\circ}$ 、 $Y\pm 58^{\circ}$ Knee Joint: $-11^{\circ}\sim 123^{\circ}$ Ankle Joint: $P-50^{\circ}\sim 20^{\circ}$ $R\pm 25^{\circ}$
CPU	14-core high-performance processor
GPU	Nvidia AGX Orin, provides 200 TOPS AI performance
Vision Module	Depth Camera
IMU	9-axis IMU
Voice Module	Microphone Array, Speaker
Battery	10.5Ah
Batter Life	2h (Walking) , 4h (Standing)
WiFi 6	Yes
Bluetooth 5.2	Yes
5G	Optional
Interface	USB、Ethernet
Firmware Upgrade	Yes
Edge LLM	MiniCPM (Optional)
Secondary Development	Yes
Warranty Period	1 Year