

# Booster T1

*Made for Developers*





# Lightweight Flexible Durable



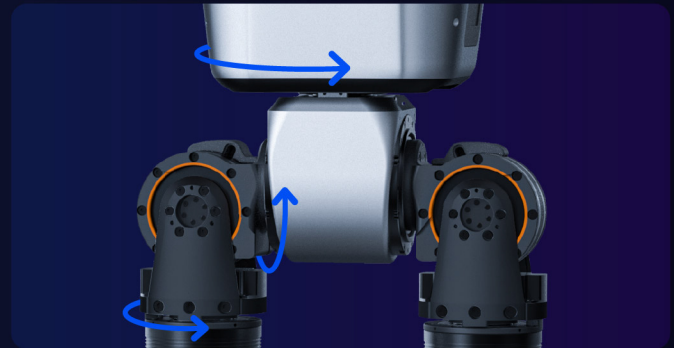
## Height about 1.2m Weight about 30kg

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

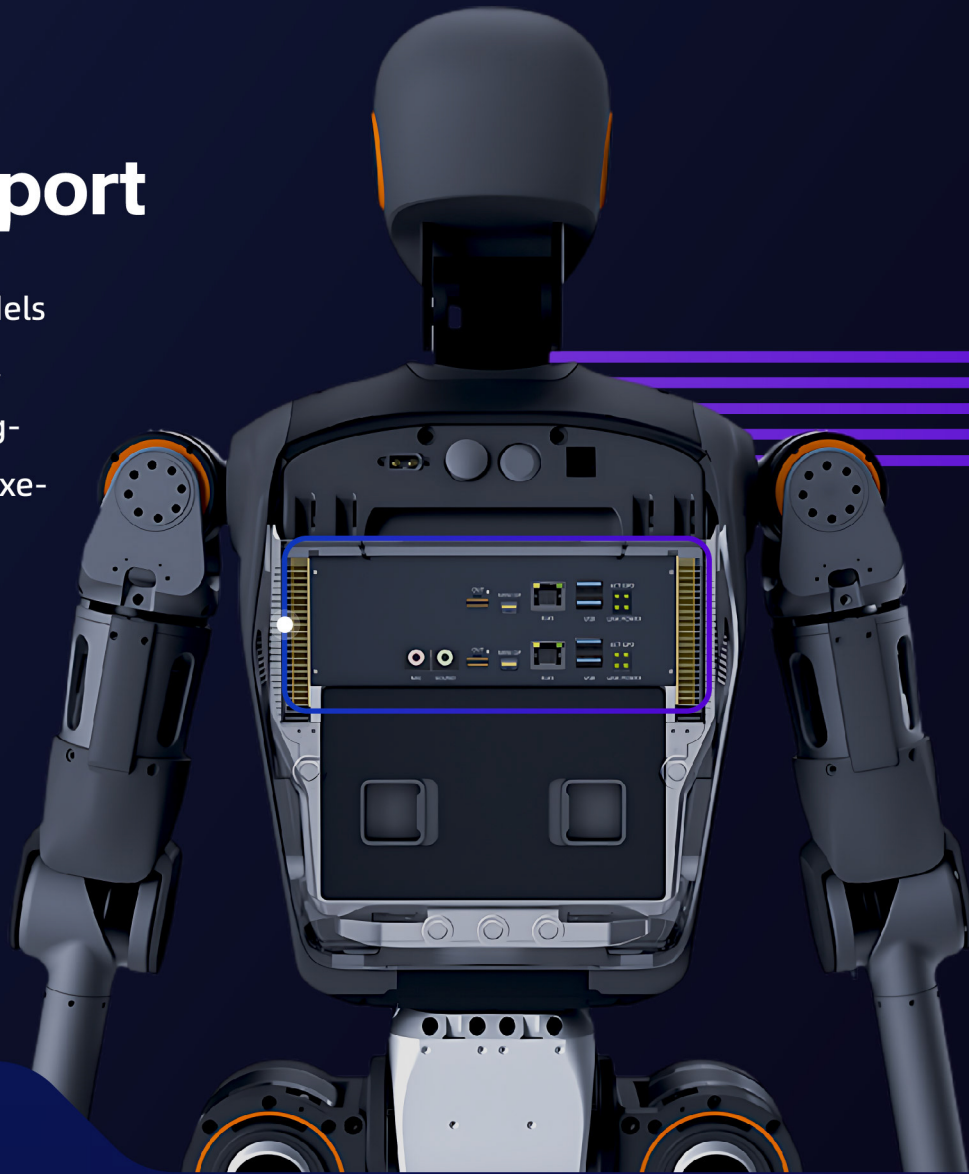
Push-ups  
Kung-fu  
Dance





# Edge LLM Support

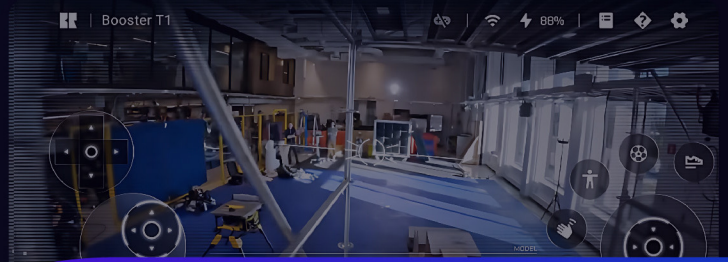
Can easily deploy edge LLM models and achieve various capabilities, including long text, retrieval-augmented generation (RAG), task execution etc.



## 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

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## 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

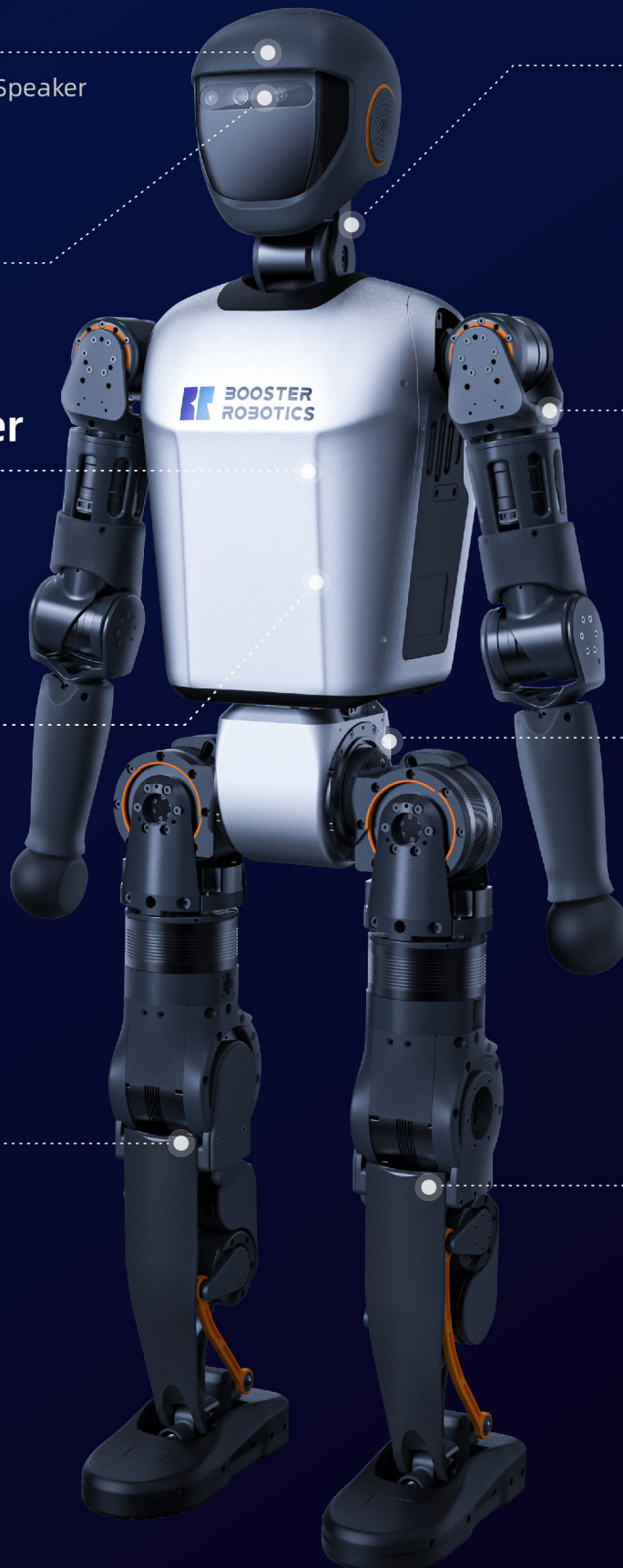
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## Joint

Peak torque of 130 N.m  
Dual encoders

## Single Leg DoFs

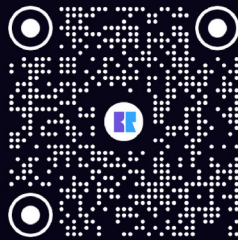
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Specification	Booster T1
Size	118×47×23cm
Calf+Thigh Length	57cm
Arm Span	45cm
Weight	About 30 kg
Total Degrees of Freedom	23
Single Leg DoFs	6
Waist DoFs	1
Single Arm DoFs	4 (Extensible)
Head DoFs	2
Max Torque of Knee Joint	130N.m
Joint Encoder	Dual 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

**BOOSTER ROBOTICS**

***Unite Developers  
to Drive Productivity Evolution***



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