

Inha-United Hardware Specification

RoboCup 2026 Humanoid Soccer League Competition(Middle Size)

Inha University, Incheon, Korea

Type	Specification Parameters	Description
Basic Parameters	Height	0.95m
	Weight	About 19.5kg
DoFs	Total DoFs	22
	Single Leg DoFs	6
	Single Arm DoFs	4
	Head DoFs	2
Operational Parameters	Walking Speed	0.5m/s
	Turning Speed	1.0rad/s
Battery Parameters	2Ah Battery Life	30min (0.4m/s)
	5Ah Battery Life	1h20min (0.4m/s)
	Charging Time	≤1h
	Cycle Life	≥500 times
Computing Platform	Processor	Jetson Orin NX 8GB, AI Performance 117TOPS
Sensors	Camera	Depth Camera
	Microphone	Microphone Array
	Speaker	1
Interaction interface	Buttons	interaction button*3
	Indicator Light	RGB LED*1
Safety Fuction	Auditory Alerts	Low Battery Alert, Joint Overheat Alert
Communication Methods	Wired connection	Gigabit Ethernet
	Wireless Connection	WIFI 6
	Bluetooth	Bluetooth 5.2
	Certification Standards	CE/FCC
Noise	Walking Noise	≤70dB
Environmental Adaptability	Environmental Adaptability	-10°C~45°C
	Operating Humidity	5%~90% without condensation



This robot is a pre-approved HSL standard platform and is used without any hardware modification. Specifications follow the manufacturer's official documentation.

Booster Robotics Document : <https://booster.feishu.cn/wiki/E3q5wF5SnitXZgkY18Uc8odBnXb>

Booster Robotics Github : <http://github.com/BoosterRobotics>