PCMS-HRG Hardware Specification
RoboCup 2026 Humanoid League
AdultSize

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https://puiching-fablab.github.io/humanoid/

Robot Name	Booster T1
Robot Picture	
Height	1.18 m
Weight	30 kg
Degrees of Freedom	Total DoF: 23; Kinematic chains (DoF each): • Head: 2 • Each arm: 4 *(extensible)* • Waist: 1 • Each leg: 6
Motors Type	Electric servo actuators *(manufacturer proprietary; model and per-joint motor type not publicly disclosed)*
Actuator Model & Wattage	*Not publicly disclosed*
Sensors Type	• Depth camera *(manufacturer/part number not disclosed)* • 9-axis IMU *(manufacturer/part number not disclosed)* • Microphone array and speaker *(manufacturer/part number not disclosed)*
Computing Unit	NVIDIA AGX Orin (advertised AI performance: 200 TOPS)
Materials	High-strength metals and engineering plastics (topology-optimized structure). Detailed breakdown *(not publicly disclosed)*
Electronics	Proprietary controller and communication electronics for servo control *(not publicly disclosed)*
Battery	Battery capacity: 10.5 Ah. Advertised battery life: 2 h (walking), 4 h (standing). Chemistry/configuration *(not disclosed)*
Interfaces	USB, Ethernet, Wi-Fi 6, Bluetooth 5.2, 5G(Optional)