

Tsinghua Hephaestus 2025 AdultSize Team Specification

Xinyu Han, Qingkai Li, Yushi Wang, Penghui Chen, Hao Dong, and Mingguo Zhao¹

Tsinghua University, Beijing, China
`mgzhao@mail.tsinghua.edu.cn`



Fig. 1. Booster T1

- **Robot name:** Booster T1
- **Height of the robot:** 1180 mm
- **Weight of the robot:** 30 kg
- **Walking Speed:** 0.8 m/s
- **Number of degrees of freedom:** 23
- **Type of motors:** Booster Robotics Integrated Joints with Max Torque 7Nm,36Nm,60Nm,90Nm,130Nm.
- **Sensors:** **Camera**, RealSense D455 with IR disabled; **Gyro**, 9-Axis IMU SurPass A500
- **Control unit:** INTEL i7 1370P
- **Perception and Decision Unit:** NVIDIA AGX Orin 32GB
- **Materials:** 7075 Aluminum Alloy and Engineering Plastics
- **Battery:** 10.5Ah Ternary lithium battery