

# RFC-Tsudanuma - Robot Specification

## Humanoid Kid-Size League, Robocup 2026

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### Mini Pi Custom (Under development)

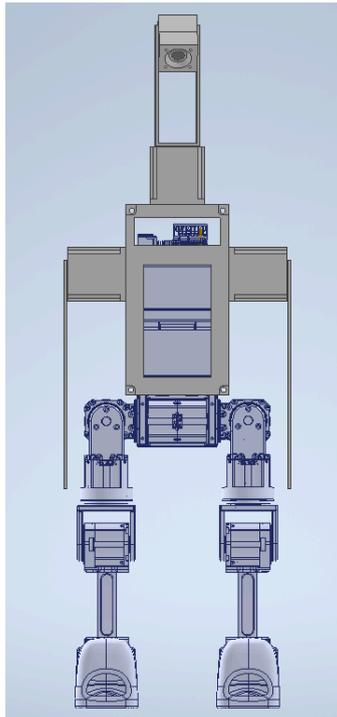


Fig.1 : Mini Pi Custom

- **Height** : 800 [mm]
- **Weight** : 11.3 [kg]
- **Walking Speed** : 1.5 [m/s]
- **Number of Degrees of Freedom** : 15
- **Type of motors:**
  - Leg : Max Torque 16Nm
  - Arm and neck : edulite 05
- **Sensors**
  - Camera : Arducam 2.3MP AR0234
  - Gyro : 6-Axis IMU
- **Computing Unit** : RK3588S
- **Materials** : Aluminum Alloy and Engineering Plastics
- **Battery**: Rated Voltage 24 [V], Rated Capacity 5000mA

## Booster K1 (RoboCup Education)



Fig. 2 : Booster K1

- **Height** : 900 [mm]
  - **Weight** : 20 [kg]
  - **Walking Speed** : 100 [cm/s]
  - **Number of Degrees of Freedom** : 22
  - **Type of motors** : Booster Robotics Integrated Joints with Max Torque 60Nm, 50Nm, 36Nm, 14Nm, 7Nm
  - **Sensors**
    - Camera : Stereo Depth Camera (Information is not provided)
    - Gyro: 9-Axis IMU SurPass A500
  - **Computing Unit** : NVIDIA Jetson Orin
  - **Materials** : 7075 Aluminum Alloy and Engineering Plastics
  - **Battery** : 100Wh Ternary lithium battery
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