

# Booster K1

We are using an unmodified version of the robot Booster K1.  
The information was taken from the documentation of the manufacturer<sup>1</sup>.  
Image of the robot shown in Figure 1.

Field	Specification
Robot name	Booster K1
Height of the robot	95 cm (standing upright)
Weight of the robot	19.5 kg
Number of degrees of freedom and type of motors on each kinematic chain of the robot	Total DoFs: 22; (6 per leg, 4 per arm, 2 in the head); <b>(motor types not disclosed by the manufacturer)</b>
Actuator model name and Wattage	<b>(types and wattage not disclosed by the manufacturer)</b>
Type of sensors used (incl. type of camera(s) and specific manufacturer part number)	<b>(types and properties not disclosed by the manufacturer)</b> Camera: Stereo RGB-D (passive); Microphone Array; 9 axes IMU;
Computing unit(s)	Jetson Orin NX 8GB AI Performance 117TOPS; WIFI 6; Gigabit Ethernet; Bluetooth 5.2;
Materials (e.g., Torso aluminium, legs and arms CFRP)	<b>(not disclosed by the manufacturer)</b> Based on visual and haptic assessment, we assume that the body and the head are made of hard plastic (ABS?), while the legs and arms are made of aluminum.
Electronics (e.g., CM730 for communicating with servos)	<b>(not disclosed by the manufacturer)</b>
Battery (e.g., 3S1P 2200mAh LiPo)	48V, 2Ah.
Open Source link if applicable	–
Other specs (Jerseys if already available)	–

<sup>1</sup><https://booster.feishu.cn/wiki/E3q5wF5SnitXZgkY18Uc8odBnXb>



Figure 1: Booster K1 (left) and NAO V6 (right). In our lab.