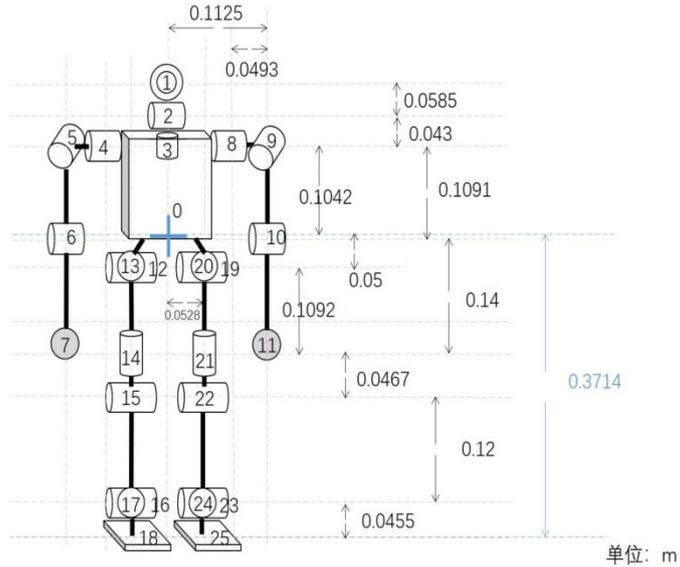


Hardware Specification of I-Kid

Robot Picture



Robot Name: I-Kid

Height: 61.78cm

Weight: 4.90kg

Walking Speed: 3~12cm/s

Degrees of Freedom: 20

Motors: DYNAMIXEL MX series servos

- MX-28[Stall Torque(N · m):2.5;No Load Speed(rev/min):55]:
Head Pitch;Head Yaw;Shoulder Pitch;Shoulder Roll;Elbow Yaw
- MX-64[Stall Torque(N · m):6.0;No Load Speed(rev/min):63]:
Hip Pitch;Knee Yaw;Knee Pitch;Ankle Pit
- MX-106[Stall Torque(N · m):8.4;No Load Speed(rev/min):45]:
Hip Roll;Ankle Roll

Camera: RERVISION USB Camera (Sony IMX323, 1080p, 70° FOV)

IMU: Yahboom MRA01-V1.0, ROS 10-AXIS IMU (magnetometer disabled)

Low Level Chip: ROBOTIS Dynamixel U2D2

High Level Computing Unit: Nvidia Jetson TX2

Materials: Iron

Batteries: 16.7 V Li-ion battery