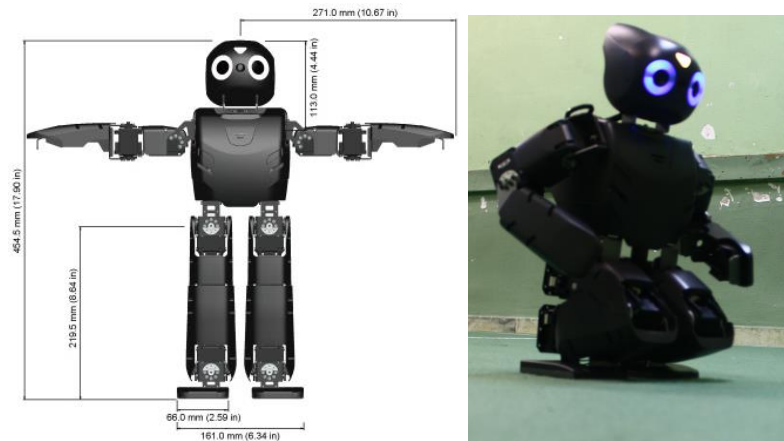


GraceBand Robot Specifications

DARwIn-OP



Team GraceBand uses standard, unmodified DARwIn-OP robots, having the following specifications:

1. Default walking speed: 24.0 cm/sec (9.44 in/sec) 0.25 sec/step - user modifiable gait
2. Height: 454.5 mm
3. Weight: 2.9 kg
4. Default standing up time from ground: 2.8 sec (from facing down) and 3.9 sec (from facing up) - user modifiable speed
5. Built-in PC: 1.6 GHz Intel Atom Z530 on-board 4GB flash SSD
6. Management controller (CM-730): ARM CortexM3 STM32F103RE 72MHz
7. 20 actuator modules (6 DOF leg x2+ 3 DOF arm x2 + 2 DOF neck)
8. Actuators with durable metallic gears (DYNAMIXEL MX-28)
9. Self-maintenance kit (easy to follow steps and instructions)
10. Standby mode for low power consumption
11. 3Mbps high-speed Dynamixel bus for joint control
12. Battery (30 minutes of operations), charger, and external power adapter
13. Versatile functionality (can accept legacy, current, and future peripherals)
14. 3-axis gyro, 3-axis accelerometer, button x3, detection microphone x2