

NimbRo AdultSize Robot Data Sheet 2024

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<http://www.nimb-ro.net>



Fig. 1. The NimbRo-OP2X robot.

- **Robot name:** NimbRo-OP2X
- **Height:** 134.5 cm
- **Weight:** 19.0 kg
- **Walking speed:** Omnidirectional walking, up to 0.5 m/s
- **Degrees of freedom:** 18 DOF (5 per leg, 3 per arm, 2 in the neck)
- **Type of motors:** Robotis Dynamixel XM-540
- **Processor:** Intel Core i7-8700T and Nvidia RTX A2000
- **Cameras:** Logitech C930e USB camera with a custom wide-angle lens
- **Sensors:** 3-axis accelerometer (LIS331DLH chip) and 3-axis gyroscope (L3G4200D chip)
- **Material:** PA12 Nylon, made with SLS 3D-printing technology
- **Battery:** 4-cell LiPo, 99.2Wh, 6700mAh, 14.8V

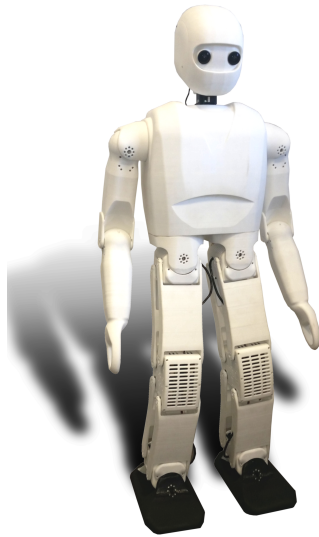


Fig. 2. The Nimbro-OP2 robot.

- **Robot name:** Nimbro-OP2
- **Height:** 134.5 cm
- **Weight:** 18.0 kg
- **Walking speed:** Omnidirectional walking, up to 0.5 m/s
- **Degrees of freedom:** 18 DOF (5 per leg, 3 per arm, 2 in the neck)
- **Type of motors:** Robotis Dynamixel MX-106R
- **Processor:** Intel Core i7-7700HQ and NVIDIA GeForce GTX 1060
- **Cameras:** Logitech C905 USB camera with a custom wide-angle lens
- **Sensors:** 3-axis accelerometer (LIS331DLH chip) and 3-axis gyroscope (L3G4200D chip)
- **Material:** PA12 Nylon, made with SLS 3D-printing technology
- **Battery:** 4-cell LiPo, 99.2Wh, 6700mAh, 14.8V