



Robotnik

G-BALL

**G-BALL** is an excellent tool for the development of multiple complex tasks, thanks to the Guardian mobile platform and the LWA 4P robotic arm.

### Product

G-Ball is a mobile manipulator consisting of the Guardian mobile platform (Robotnik) and the LWA 4P robotic arm (Schunk). G-Ball has high performance and competitive price.

The mobile manipulator enables the arm to interact with environments that could not be directly accessed by itself, while provides the mobile platform with direct handling capabilities. Consequently the complete robot becomes an excellent tool for the development of multiple complex tasks.

### Applications

- Research and development.
- High mobility indoor / outdoor navigation
- Search in deactivation of improvised explosive devices (*IEDD*) or explosive ordnance devices (*EOD*)
- Remote surveillance
- Remote measurement and mapping
- Ambient Assisted Living



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## Main Features

### LWA 4P

- 6 DOF antropomorphic arm.
- Excellent payload-to-weight ratio.
- Allows mounting Force/Torque sensors.
- Joint position/Speed control.
- Brushless DC Motors with permanent magnetic brakes.
- Absolute position sensing.
- High accuracy Harmonic Drive gearboxes .
- Flat tool changer (including free signals and power).

### WSG - 50

- Servo-electric 2-finger parallel gripper with highly precise gripping force control and long stroke.
- Interchangeable fingers with tactile array or force sensing options .
- Gripping force 120 N.
- Stroke per 55 mm.
- Weight 1.2 Kg.

### Guardian

- Rough Platform.
- High mobility.
- Modular system.
- High performance hybrid under carriage with tracks and wheels.
- Wifi/Wimax/Radio/Cable Communications.
- Configurable IP protection up to IP65.

### System

- PC controller.
- Open-source control software.
- Software architecture based on ROS.

