



AUTOMATIZACIÓN Y ROBOTIZACIÓN

# MOBILE ROBOTS



# MOBILE ROBOTS



## ● RESCUER

Dimensions – 100x780x600 mm

Weight – 150 kg

Payload – 200 kg

Speed – 1,25 m/s

Maximum climbing angle – 45°

Operative system – LinuxRT

Comunications – RF Wifi/Wiman

# MOBILE ROBOTS



## ● GUARDIAN

Dimensions – 1050x600x400 mm

Weight – 75 kg

Payload – 50 kg

Speed – 1,25 m/s

Maximum climbing angle – 45°

Controller

Basic version – Radio control

Complete version – Linux RT

# MOBILE ROBOTS



General applications:

- Field service robotics applications : non-factory robots, typically mobile, that must operate in complex and dynamic environments
- High mobility requirements including stair climbing.
- Applications where high IP level is required.
- SLAM techniques.
- Vision based SLAM.

# MOBILE ROBOTS

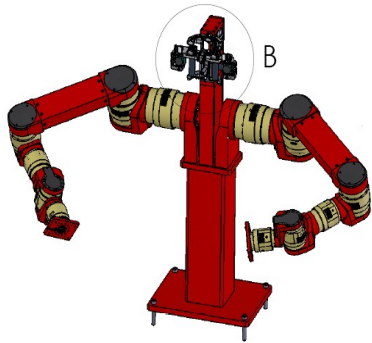


Specific applications:

- Forestry robots: surveillance, fire detection, etc.
- Security: surveillance, perimeter patrol, etc.
- Civil Protection applications
- Site protection
- Military applications
- Law enforcement applications
- Inspection in environments inaccessible to humans



# ARMS + TORSO KITS



# ARMS + TORSO KITS



- MODULAR ROBOTIC ARM 6DOF

Different Configurations

4DOF / 5DOF / 6DOF / 7DOF

Power supply – 24VDC

Payload – 9 kg

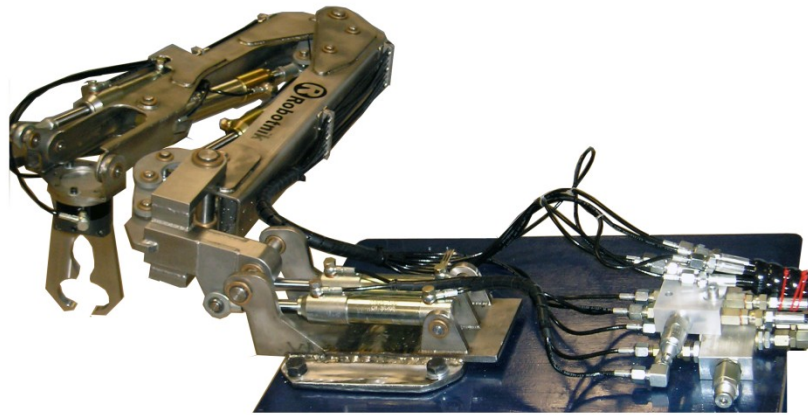
Total Mass – 25kg

Can bus control



# ARMS + TORSO KITS

- HYDRAULIC ARM



Configuration – 5DOF + gripper

Reach – 1300 mm

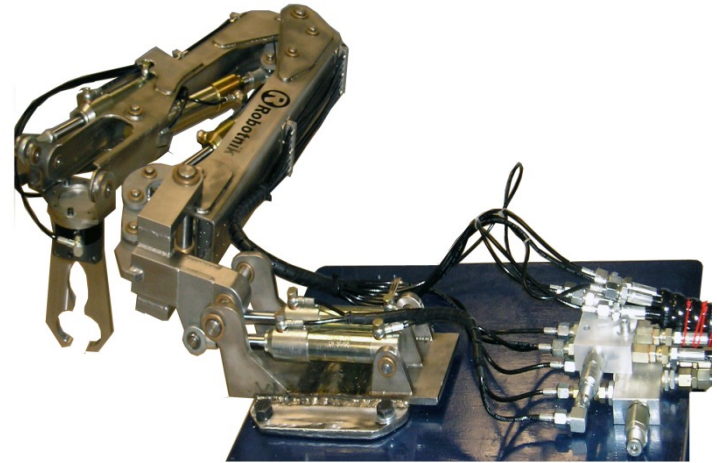
Load – 50kg

Weight – 40kg

Flow – 2lpm

Normal power – 1100W

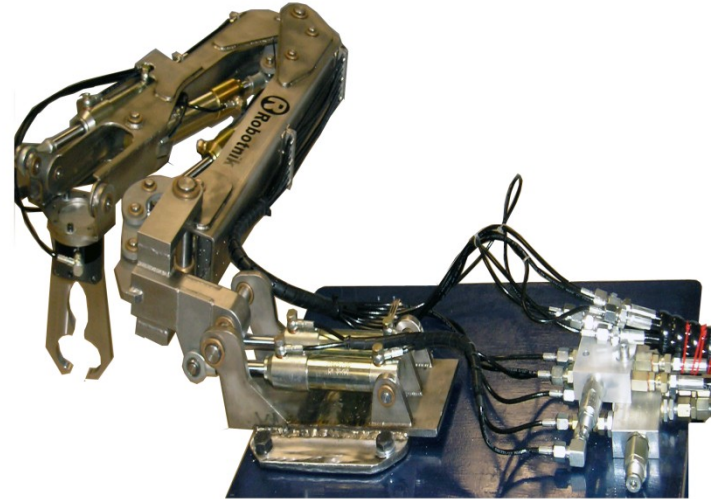
# ARMS + TORSO KITS



General applications:

- Applications where the arms have to cooperate or work in the range with persons (WAM 25W - 7DOF).
- Contact with environment or collisions.
- Haptics applications where the operator has to remotely operate the arms. WAM backdrivable technology provides the best solution to force control, allowing high precision force control only by reading the motor current consumption.
- Cooperative manipulators, grasping, body grasping.

# ARMS + TORSO KITS



Specific applications:

- Haptics in Manufacturing – combination of dexterous trajectory control with force/torque control
- Surgical robot
- Health care - Neuromuscular Rehabilitation
- Robot assistant / House hold assistant
- Research in human/primate learning and motor control /  
Neurorobotics
- Human-like assembly robot

# MOBILE ROBOT + ARMS + ESTEREOHEAD

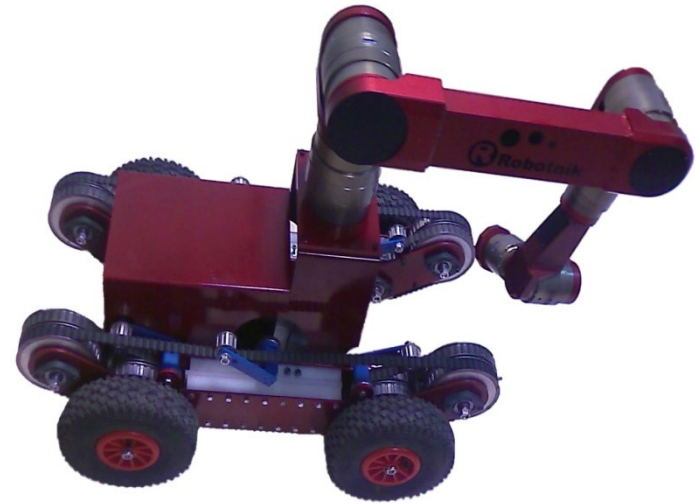
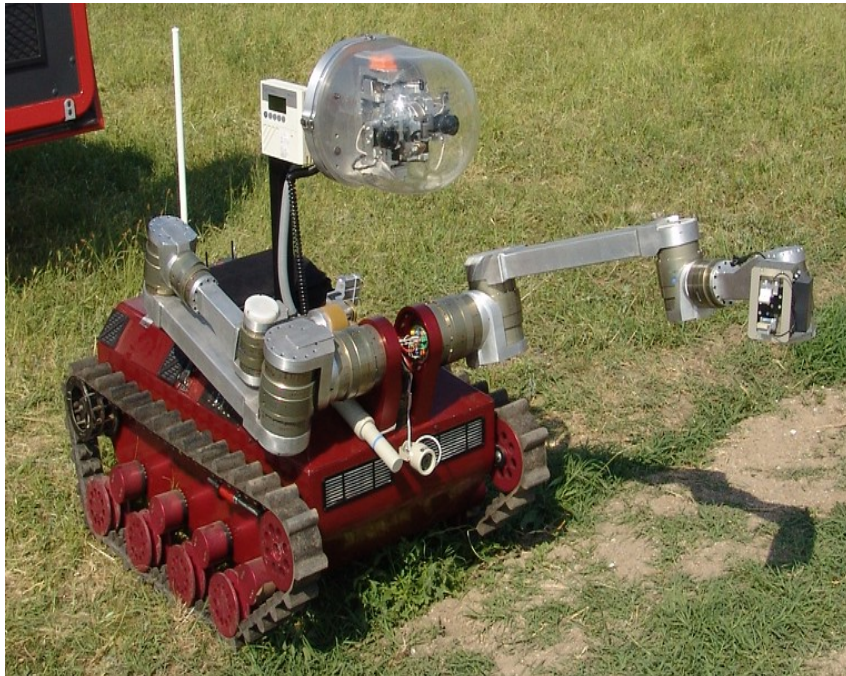
- General applications:

- Field service robotics applications
- High mobility + handling requirements
- Mobile manipulation
- Telerobotics

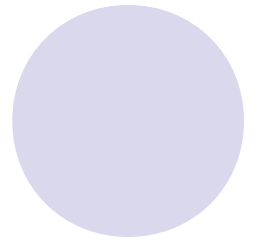
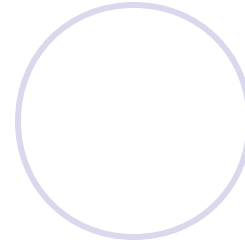
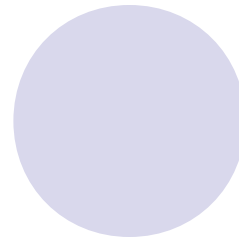
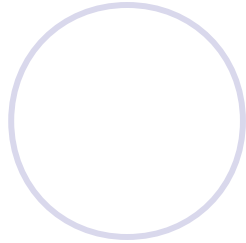
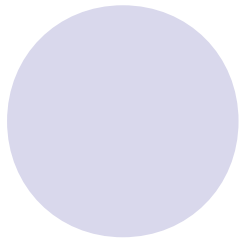
- Specific applications:

- Forestry
- Agriculture robots: precision agriculture, etc.
- Maintenance robots / cleaning
- Civil Protection applications
- Search and Rescue
- Military applications including EOD/IEDD
- Inspection in environments inaccessible to humans
- Robot assistant in industrial environments
- Robot assistant in security context

# MOBILE ROBOTS + ARMS + ESTEREOHEAD







THANK YOU

[.www.robotnik.eu](http://www.robotnik.eu)