

MINIBOT

Compact autonomous ground robot for confined spaces, hazardous zones, and environments where human entry is not an option.

Width: 44.5 cm	Max speed: 4.4 km/h
Length: 45 cm	Max slope (loaded): 30%
Height: 23.5 cm	Operating time: 2 hours
Weight: 12.2 kg	Battery: 14.6V · 24Ah · LiFePO4
Payload capacity: 20 kg	Chassis: Aluminium

DRIVE & MOTOR

Motor configuration	4 × 85W independent drive
Peak torque	14.8 Nm
Nominal torque	5 Nm
Ground clearance	9.5 cm / 6.2 cm

INTEGRATED SENSORS

RGB camera	1080p
Thermal camera	-20°C to +45°C
Particulate	PM2.5 sensor
Environmental	Temperature · Humidity · Pressure
Gas detection	VOC — Volatile Organic Compounds
Navigation	GNSS + 6-axis IMU
Odometry	Quadrature encoder per motor

PAYLOAD INTERFACE

Communication	I2C 5VDC · SPI 3.3VDC · UART 5VDC · USB-A · Ethernet
Power output	12VDC (×2) · 5VDC (×2) · 24VDC

DESIGNED FOR

- CBRN & HazMat reconnaissance — chemical, biological, radiological zones
- Underground & confined space inspection — mines, tunnels, culverts
- Emergency & disaster response — collapsed structures, post-earthquake
- Forensic investigation — hazardous crime scene analysis
- EOD support — suspected package assessment with robotic arm payload