








# TECHNICAL SPECIFICATIONS

## EX-ROBOT



### GENERAL SPECS

 Weight	 Dimensions	 Driving time	 Speed	 Powder Coated Body	 Operating ambient temperature	 ATEX/IECEX Zone 1 certified
75 - 100kg <i>Depending on accessories</i>	950 x 690 x 555 mm (L x W x H)	90 - 120 minutes	0.8 meter/sec (2.5 km/hour)	to Customer's colour scheme.	from -20°C to 50°C	IIB (ethylene or similar)

#### MOBILITY

Integrated unit of high grade aluminium with:

- Speed 2.5 km/hour
- Skid steering on the spot
- Range 1.5 km
- Drives up and down 30 degree slopes
- Drives up and down 20cm ledges

#### CAMERA MODULE

Integrated unit of high grade aluminium with 3 cameras:

- Glass windows with nano coating for self-cleaning
- Mixture of hi-resolution 18.1 mega pixel and lo-resolution 3.1 mega pixel cameras facing forwards, downwards and upwards
- All cameras have digital zoom, point and click, snapshots and exposure control

#### LIGHT MODULE (OPTIONAL)

Integrated unit of high grade aluminium with 3 lights:

- Three LEDs orientated in the same direction as the cameras
- Each LED has 690 lumen output

#### TRACKS

Specialist anti-static tracks with excellent spot steering and step climbing abilities

#### MICROPHONE

Mono front facing microphone

#### BATTERY PACK

Ex enclosure containing three 12V 9 Ah lead crystal batteries

#### MAIN ELECTRONICS BOX

Ex enclosure containing a custom main board that integrates the robot's functions:

- Intel Atom processor with Braswell 14 nm process technology, 4 cores, 8 Gb, 1,04 Ghz
- 2x STM 32bits processors to support main processor
- Battery charger system and battery management system
- Integrated sim-card or WiFi

#### GAS SENSOR OPTIONS

- Ion Science Falco 1.1 for volatile organic compounds (VOCs)
- Honeywell 3000 Mk II for toxic gases
- Crowcon IR MAX for light hydrocarbon gases

#### INDUCTION CHARGER AND DOCKING STATION

Patented induction charger with:

- Foreign object detection system
- Inputs 24 VDC, 110 VAC, 120 VAC, 220 VAC or 240 VAC
- Robot can also be supplied with a quick charge socket

#### 4G LTE WIRELESS CONTROL SYSTEM


Dual band antennas that connect the robot to the control station using a public or private 4G LTE network

WiFi offered as an alternative to 4G

#### CONTROL STATION

The robot can be driven using laptop with a game controller or a smartphone

#### ATEX / IECEX ZONE 1 CERTIFICATION

 II 2 G Ex db eb ib mb qb IIB T4 Gb