

ECO / AGRI



AUTONOMOUS UTILITY ROBOT

Autonomous utility robot for farming and the environment

 Agriculture

 Environmental

 Farming

 Wild Life

 Forestry

PRODUCT CATALOGUE
2026

Agriculture

Crop support, soil preparation, spraying and material transport.

Environmental

Monitoring land, water and wildlife across large estates.

Farming

A robotic arm and rear interface for the implements a farm already owns.

Forestry

Ten hours on a charge across tracks, fields and forest floor.

01

THE ROBOT

ECO Agri

Autonomous utility robot for farming and the environment

Supports in farming and environmental operations **monitoring**, crop support, soil preparation, spraying, or material transport.

01 Overview · Figures and applications

02 Main features · The specification, card by card

03 A working day in the field · On duty



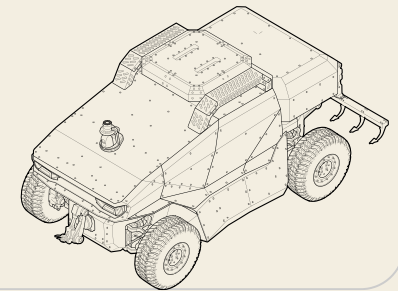


ECO / AGRI 



Supports **in farming and environmental operations monitoring**, crop support, soil preparation, spraying, or material transport.

W 2010 MM L 3620 MM H 1520 MM



Weight

1700 KG

Max Speed
Software limited

10 KM/H

NVIDIA-powered



10h Battery
8h Charging

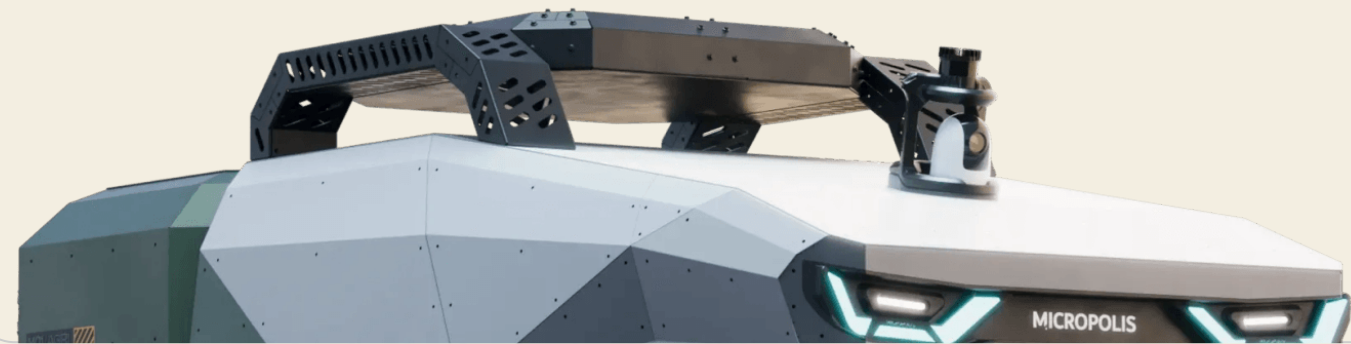


Built for the land, engineered to work it

Every figure on these pages is the production ECO Agri's — the same specification the website carries.

L4 Autonomy

for gated communities and areas



4x In-Wheel Motors



Double

Steering



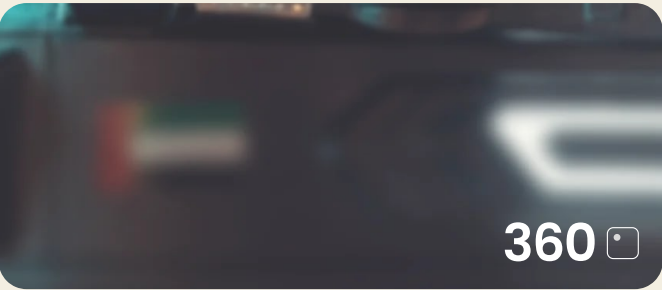
Crab

Steering



 INTELLIGENT
SPOT

PTZ



360°

Obstacle Detection



Automotive cameras

Payload

Up to



500

T

235_{MM}

Ground Clearance

25°

25°

Maximum Slope

Built for the land, engineered to work it (continued)

Every figure on these pages is the production ECO Agri's — the same specification the website carries.

Drone Integration
Smart compartment



Supported Connection



4G/5G

WIFI

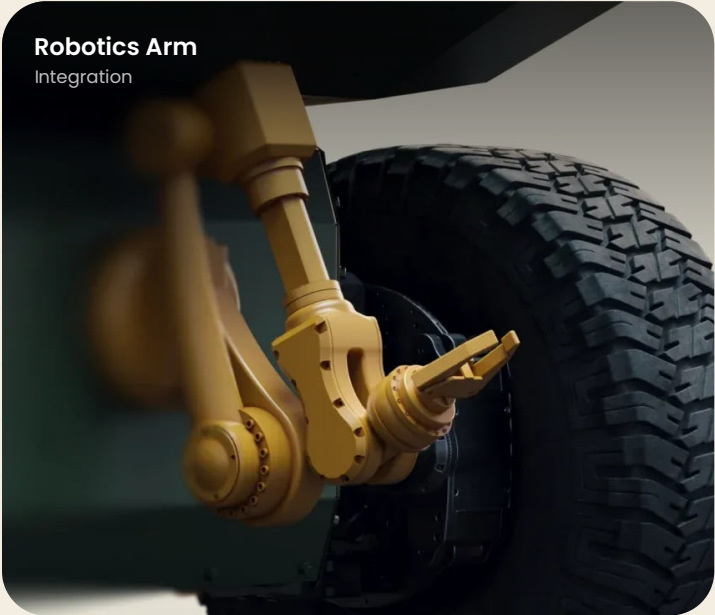
RADIO

Operating Temperature



-10 ~ 70_c

Robotics Arm
Integration



Rear Interface
hook/attachment frame



A working day in the field

At a deliberate 10 km/h, with a 500 kg payload, a robotic arm mount and a rear hook and attachment frame, the ECO Agri carries the implements a farm already owns — and a drone to watch the crop from above.



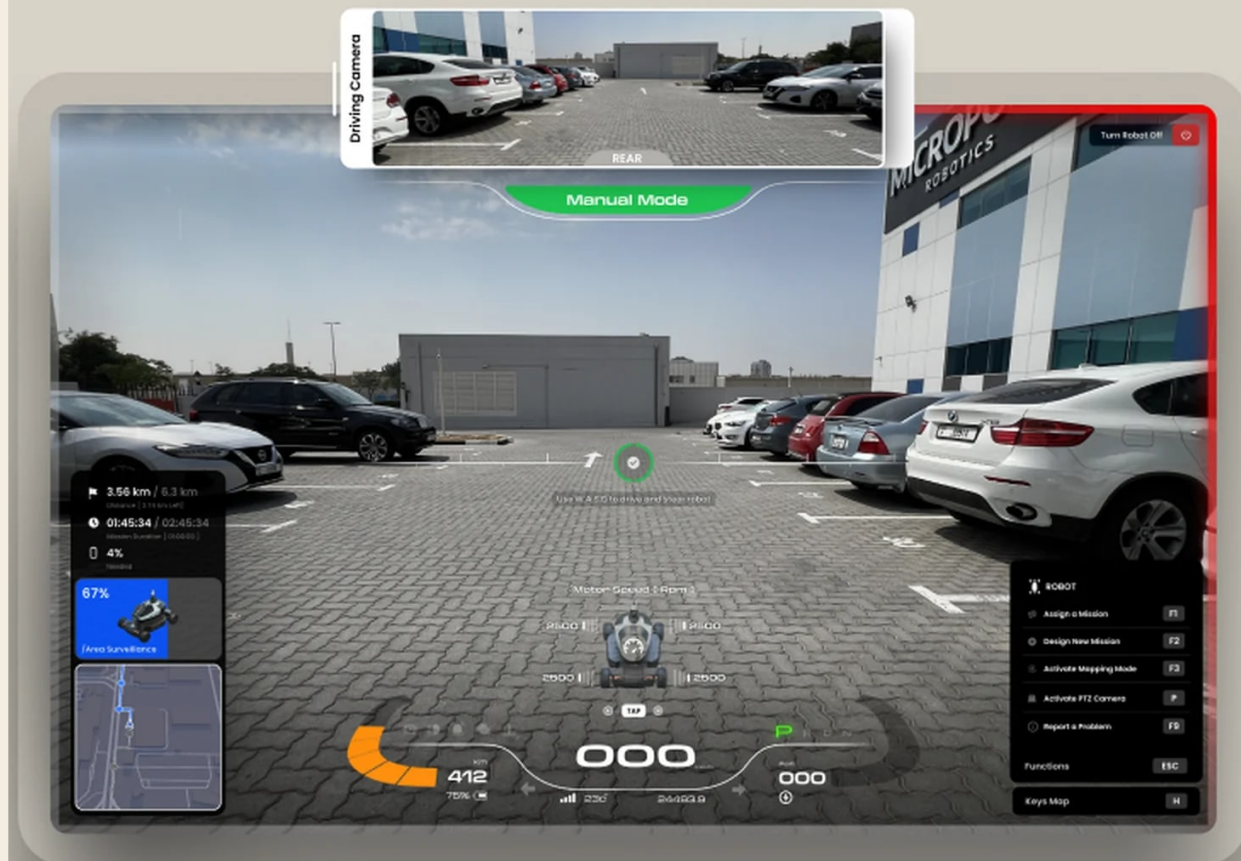
02

CORE TECHNOLOGIES

The ecosystem behind each solution

Five platforms, one autonomy stack — developed end to end in house and shared by every Micropolis robot.

- 01 Tele Operator** · Remote Control
- 02 Micro Pilot** · Autonomous
- 03 Mission Planner** · Business
- 04 Fleet Manager** · Large Operation
- 05 Micro OS** · Integrated HW



Tele Operator Remote Control

Command and control center that provides the operator with real-time access to the robot

TELE OPERATOR Live drive screen

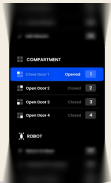


Real-time **telemetry**



Onboard systems

Control



System **Health**



Live **surround** view



Safety **warnings**



Driving **modes**



Real-time **streaming**

Low latency

5G RADIO

~250ms

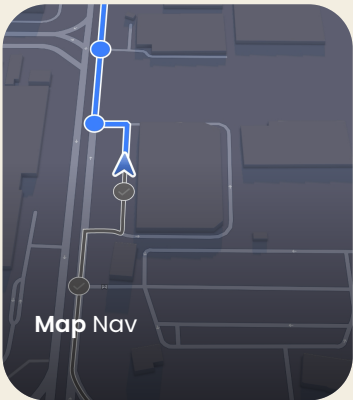
PTZ Camera control



Multi-support RC inputs

- Keyboard
- Joystick
- Customized Station

Map Nav



Diagnostics



Micro Pilot Autonomous driving

The **autonomy system** behind our robots, developed end to end in house. Sensing, localization, perception, prediction, planning and control

- 01 Sensing
- 02 Localization
- 03 Perception
- 04 Prediction
- 05 Planning
- 06 Control



Gated Stack

Autonomous

Where the constraint isn't speed, it's people. Few traffic rules apply and nobody is obliged to follow a lane. The vehicle keeps continuous close-range awareness in every direction, holds onto objects through the moments they're obscured, and treats everyone nearby as free to change direction at any time. The result is a vehicle that moves smoothly through shared space rather than hesitating at every pedestrian.



Urban Stack

Autonomous

The stack reasons about intent, predicting how road users will move and how that meets its own plan. A road understanding layer establishes the rules in force at any moment, lane structure and right of way, by checking prior map knowledge against live observation rather than trusting either alone. Planning then works within those rules the way an attentive driver does, negotiating traffic instead of merely avoiding it.



Off-road Stack

Autonomous

Off-road there are no lanes, no boundaries and no map, so the vehicle reasons about the terrain instead. It continuously judges the ground ahead: what the surface is, whether it will hold the vehicle, and what else is moving across it. Routes are chosen on that basis rather than on road structure. The result is a vehicle that works in dust, over broken ground, and across terrain nobody has surveyed.

Operations, designed and scaled

Missions are designed once, run across the fleet, and every robot boots the same in-house operating system.

MISSION PLANNER Operations, designed

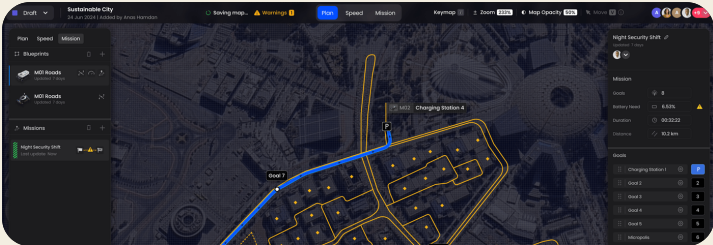
Enables operators to **design, schedule, and manage** autonomous vehicle missions

FLEET MANAGER Scale up with fleets

Centralized **visibility** and **operational oversight** across the entire robotic fleet

MICRO OS Orchestration behind the scene

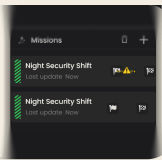
One operating system powers everything above. Our own robotics OS, shaped end to end, from the kernel to over-the-air updates



Route design



Mission schedule



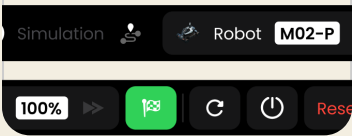
Add-ons

- Supports for different maps
- Multi-user route edit
- Customized rules per goal

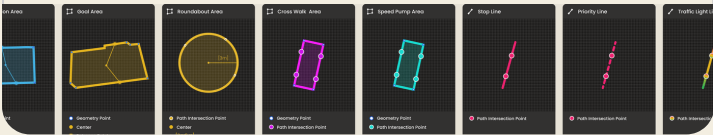
Rule-base goals



Mission simulation

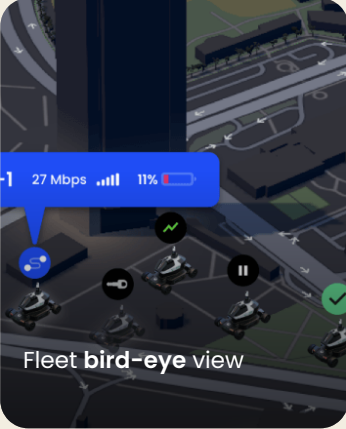


Custom traffic rules



Custom Integrations

- ERP systems
- Assets management
- Fleet management



Seamless robot onboarding



Maintenance Schedule



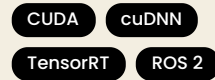
Purpose-built

Linux distribution

- One image per robot, built for its role
- Only what the application needs

Robotics at the edge

GPU accelerated



Every interface native

Kernel-level drivers

- CAN bus
- Serial & USB
- Ethernet

Fail-safe updates

Over the air



Built for developers

- SDK cross-compiled per robot
- Develop and test with no hardware in hand

03

RELATED HARDWARE PLATFORM

The platform beneath every robot

Every Micropolis robot **starts with a proven foundation** — a modular chassis engineered for its environment, payload and mission.

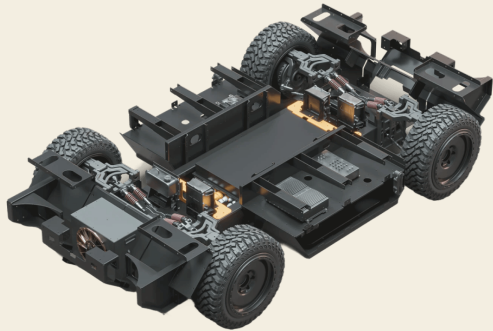


- 01 **M-Platform™** · Full Size Off-road
- 02 **Mechanics** · Drive · Steer · Brake
- 03 **Electronics** · Vehicle control units
- 04 **Energy** · Battery architectures

M-Platform™ Mobility specific platforms

Every Micropolis robot **starts with a proven foundation** — a modular chassis engineered for its environment, payload and mission

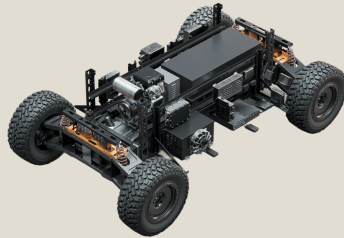
MEGA SIZE URBAN



Maximum payload and duty cycle. A heavy-frame architecture engineered for industrial-scale loads, continuous operation, and demanding duty cycles.

FULL SIZE OFF-ROAD

Under the ECO Agri



Off-road and expedition-grade. A high-clearance chassis built for the harshest terrain, engineered for extended autonomous operation in unstructured environments.

FULL SIZE URBAN



The all-terrain workhorse. The flagship platform — balanced payload, range and agility for logistics, inspection, and security across mixed environments.

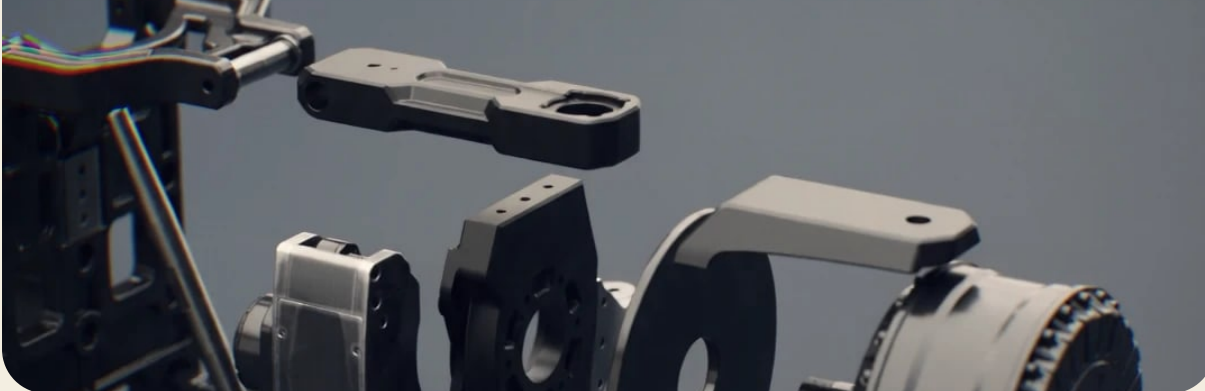
COMPACT OFF-ROAD



Speed and precision. A lower-profile chassis built for fast deployment and tight maneuvering — ideal for urban autonomy and rapid-response missions.

One chassis, your mission

Configured for your payload · Supported end to end



Drive

4x in-wheel

Rear interface

Hook / attachment frame

Payload

up to 500 kg

Robotic arm

Integration mount

Mechanics Drive, steering & braking

Proprietary **electric drive, steering and braking** — one vertically integrated mobility architecture, designed and validated in house

In-wheel drive

Hub motors · 4 to 22 kW

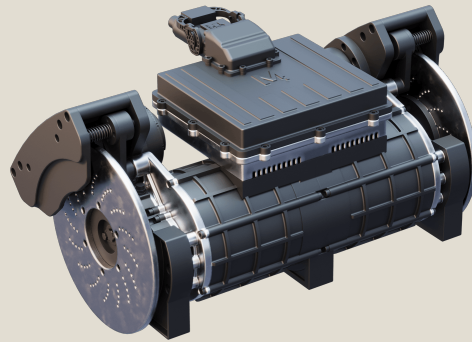
- Independent wheel control
- Torque vectoring
- Compact packaging



Mid-drive

High-torque units · 10 to 35 kW

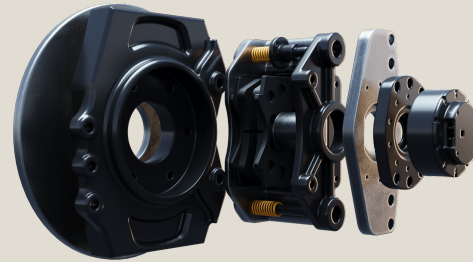
- High torque delivery
- Continuous-duty rating
- Industrial & off-road use



Brake-by-wire

Electric braking

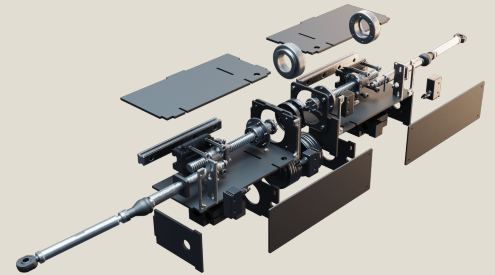
- Independent brake control
- Regenerative braking
- Fail-safe by design



Steer-by-wire

Multi-mode steering modules

- Independent wheel steering
- Multi-directional movement
- Autonomous trajectory control



Peak torque

Mid-drive, at the wheel

780 N·m

System voltages

Matched to each platform

96 V 400 V 500 V

One architecture

Full control of driving dynamics

UGV AMR OFF-ROAD

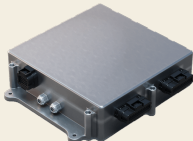
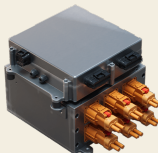
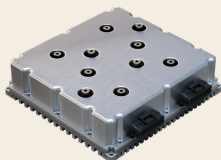
In-house, end to end

Designed, engineered, validated

DRIVE STEER BRAKE

Electronics Modularity is the architecture

Beneath every platform sits a **vertically integrated electronics stack** — power, control and compute on one deterministic CAN backbone

Master control MCU-1.1.0® - Real-time control algorithms - Multi-protocol communication - Full sensor acquisition 	Auxiliary control RCU-0.1® - Lights, locks & actuators - H-bridge motor control - Isolated I/O & CAN diagnostics 	Power management PMU-2.1® 24–48 V wide input - Multi-rail regulation - Sequencing & diagnostics 	Power distribution PDU 1.0® - One source, every circuit - Integrated circuit protection - Ruggedized connectors 	HV distribution HV-PDU 1.0® 400–800 V DC routing - Overcurrent protection - Automotive-grade connectors 	Motor drive MDU 1.0® - BLDC commutation - Controlled three-phase output - CAN-commanded torque 
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Energy Purpose-built power

Purpose-built battery architectures — LiFePO₄ chemistry, smart BMS and liquid cooling, engineered for mission-critical reliability

The battery platform LiFePO₄ · Liquid-cooled · CAN 	M2 pack 96 V system 16 kWh	M1.5 pack 96 V system 53 kWh	M01 pack 400 V high-voltage system 38.5 kWh	Inside every pack - Smart BMS — monitor & balance - Liquid-cooling loop - CAN telemetry - Multi-layer protection
	Fail-safe protection Multi-layer OVER-CHARGE OVER-CURRENT SHORT-CIRCUIT	Fast charge Maximum charging current 280 A	Range extender EU5 & EPA certified V-twin 60 L TANK REMOTE START	

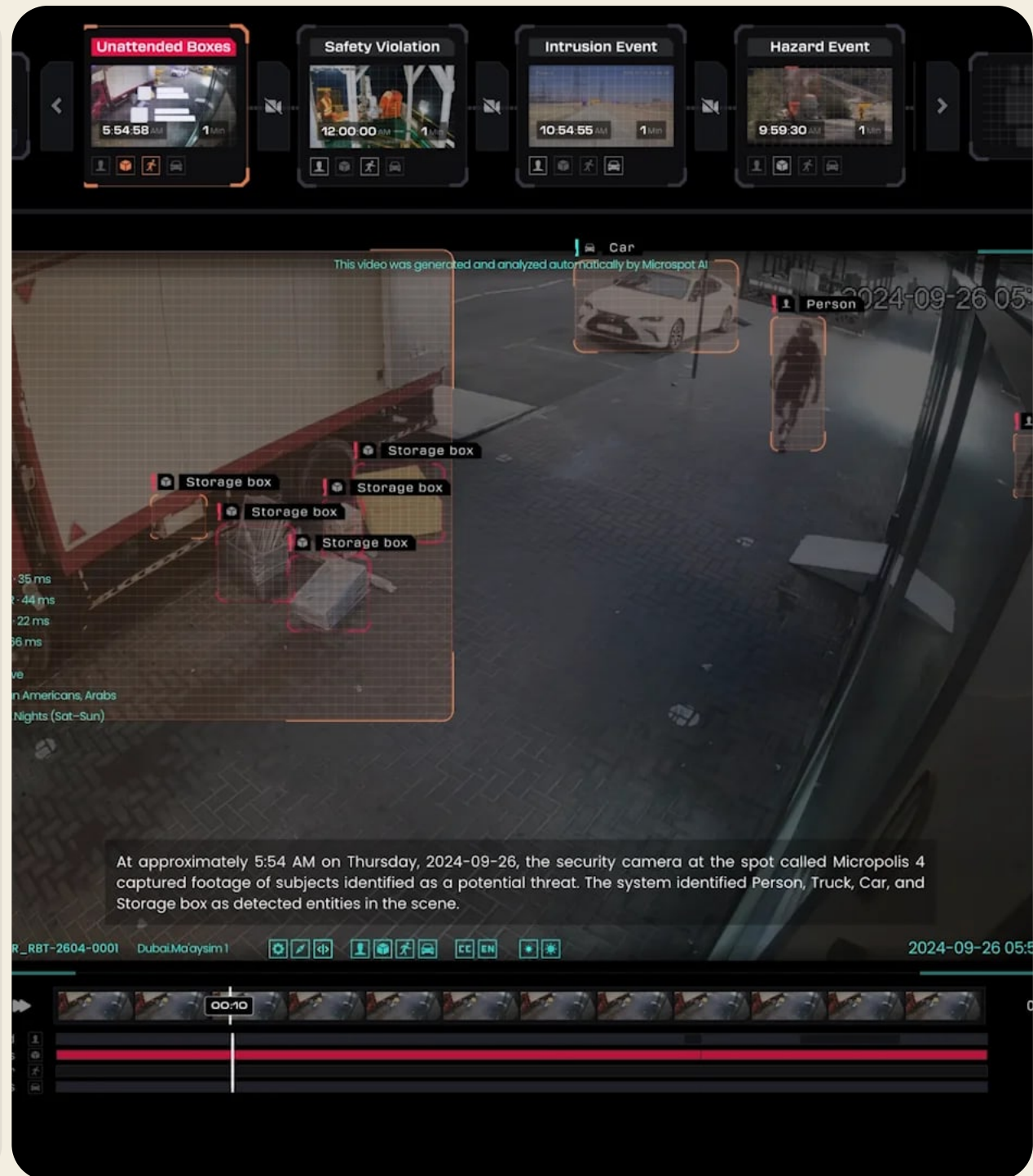
O4

INTELLIGENT SPOT

A customized AI suite for the robot's missions

AI perception and reasoning system that converts continuous video into a small number of structured, verified, and explainable events.

- 01 The platform** · What it connects and computes
- 02 Five layers** · Sixteen intelligences
- 03 In action** · Cases, and the ECO Agri's missions



The intelligence behind the scene

Layered technology, performance focused



Intelligence in action

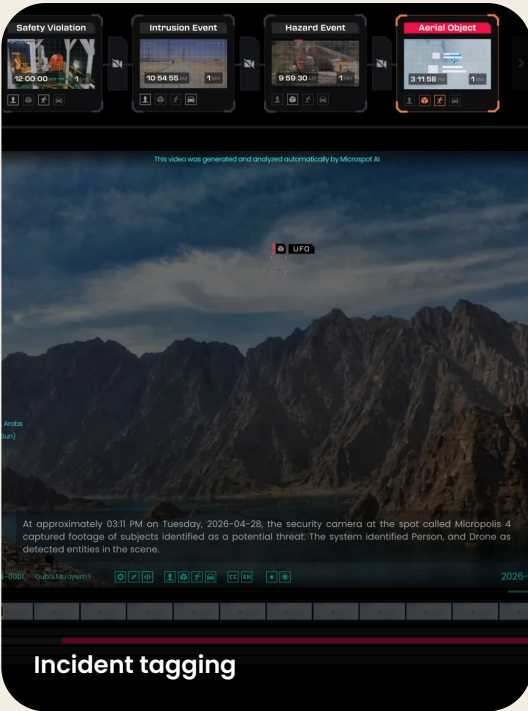
Some of many behavior and detection cases. Below, the layers tuned to the ECO Agri's own missions.



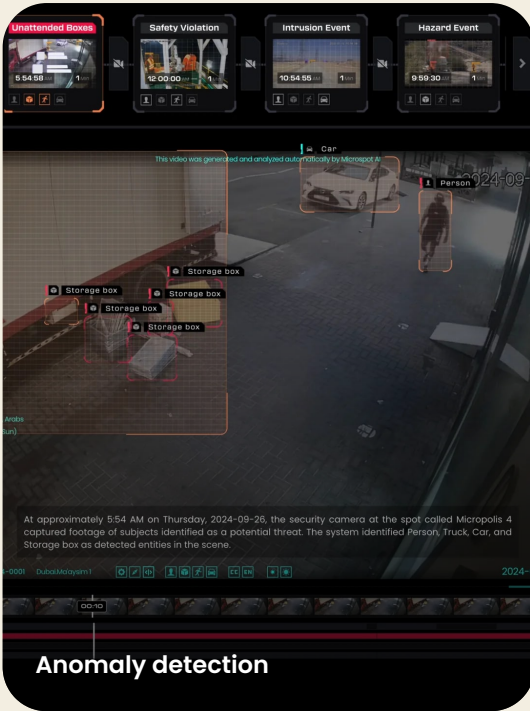
Real-time monitoring



Behavior analysis



Incident tagging



Anomaly detection

TUNED TO THE ECO AGRI'S MISSIONS

Mission Crop monitoring

- Scene Intelligence™
- Adaptive AI Processing™

The whole field understood, running only what the season requires.

Mission Wildlife & environment

- Behavioral Intelligence™
- Smart Event Correlation™

Movement read over time; one event, not four hundred alerts.

Mission Estate security

- Intelligent Threat Assessment™
- Vehicle & Access Intelligence™

Separating what matters from what merely moved, every vehicle accounted for.

Mission Aerial survey

- Real-Time Situational Awareness™
- AI Evidence Builder™

The drone's feed read live and documented, in the same console.

Connects

- CCTV
- IoT sensors
- Micropolis robots

[Inquire about your cases](#)

Turn live video, sensor data, and robotic patrol inputs into actionable operational awareness.

05

 SPECIFICATIONS

Every figure, on one page

The full specification of the ECO Agri, and how to reach us.

01 Specifications · At a glance

02 Talk to us · Contact



ECO Agri at a glance

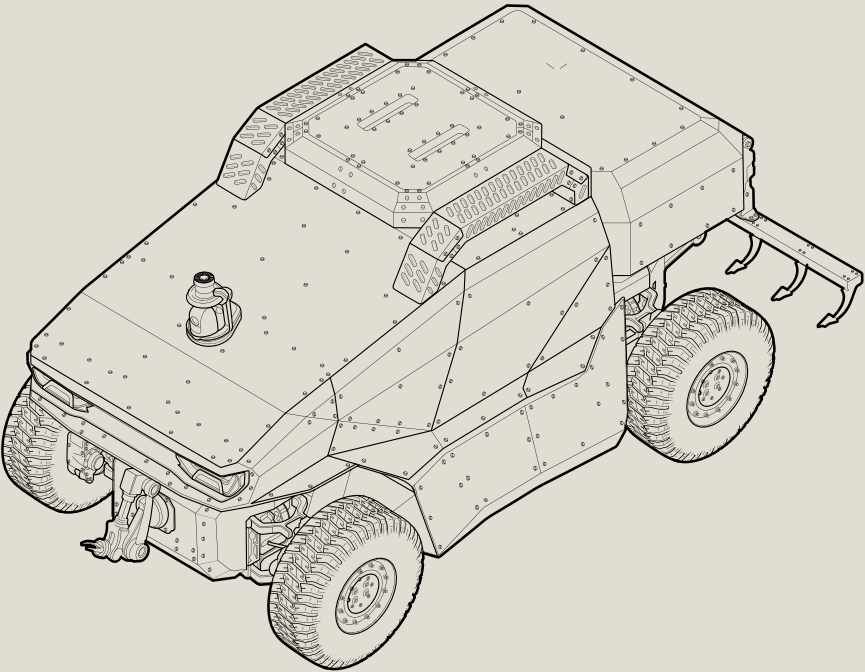
Specifications are subject to change without notice. Figures marked “software limited” are configurable per deployment.

Dimensions (W × L × H)	2010 × 3620 × 1520 mm
Weight	1700 kg
Max Speed	10 km/h, software limited
Compute	NVIDIA-powered
Battery	10h runtime · 8h Charging
Steering	Double & Crab steering

Obstacle Detection	360° · Automotive cameras
Drive	4x In-Wheel Motors
Payload	500
Ground Clearance	235 mm
Maximum Slope	25°
Drone Integration	Smart compartment

Supported Connection	4G/5G · WIFI · RADIO
Operating Temperature	-10 ~ 70 c
Braking	Brake-by-wire, regenerative
Autonomy	L4 · Micro Pilot Off-road Stack
Hardware platform	M-Platform™ Full Size Off-road
Remote control	Tele Operator · 5G / radio, ~250 ms

ECO / AGRI



W 2010 MM L 3620 MM H 1520 MM



ECO / AGRI 

MICROPOLIS
ROBOTICS

Talk to us

Website
micropolis.ai

Work inquiries
info@micropolis.ai

Telephone
+971 4 276 7008

Headquarters
Dubai Production City, Dubai, UAE

NYSE American: MCRP

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