LOGX / MAX

AUTONOMOUS LOGISTICS PLATFORM

Heavy-duty autonomous logistics between warehouses

Logistics · Cargo · Warehouse · Docks

PRODUCT CATALOGUE 2026

Logistics

Inter-warehouse runs on a fixed schedule, without a driver.

Cargo

Five tonnes of cargo, equipment, parts and supplies per trip.

Warehouse

Docks to doors, threading yards and aisles at 80 km/h on the open road.

Docks

Container and pallet moves across ports and industrial estates.

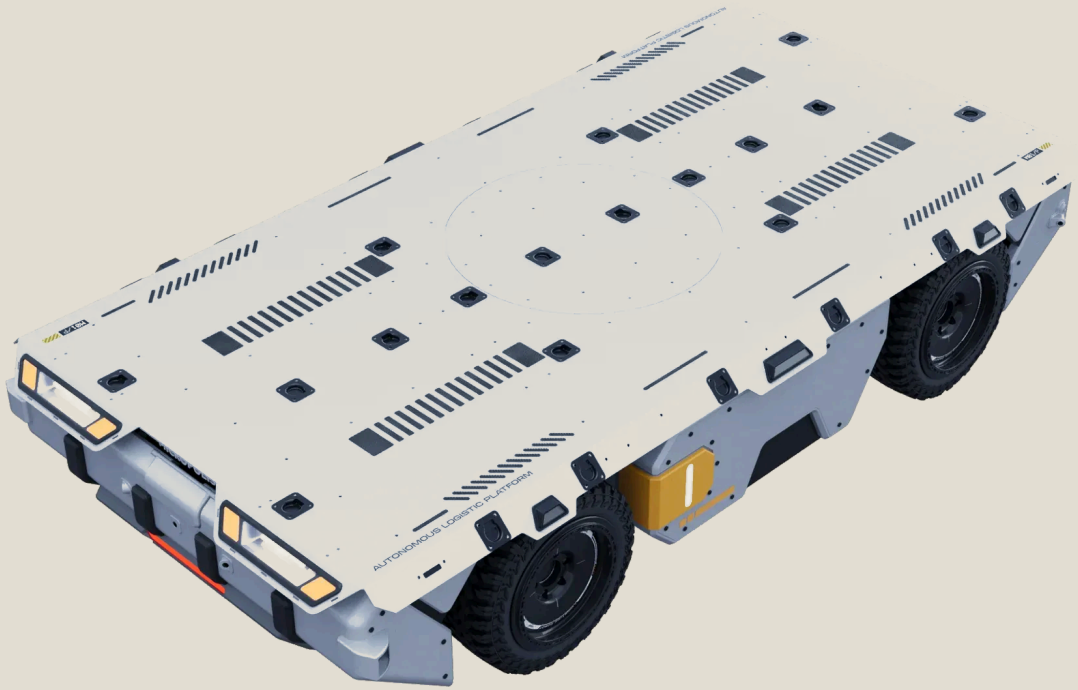
01

THE ROBOT

LOGX Max

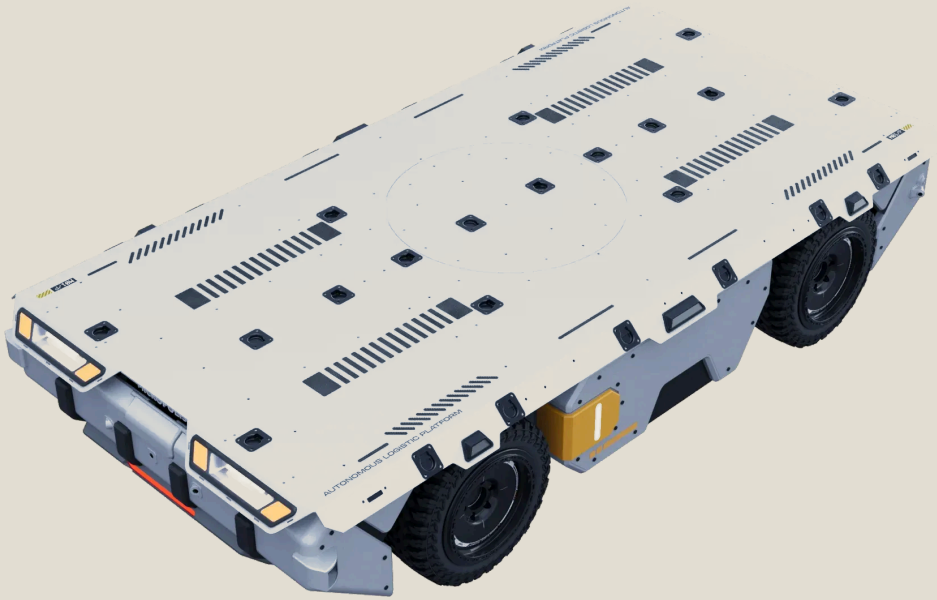
Heavy-duty autonomous logistics between warehouses

Supports **heavy-duty and inter-warehouse logistics operations**, moving cargo, equipment, parts, and supplies.

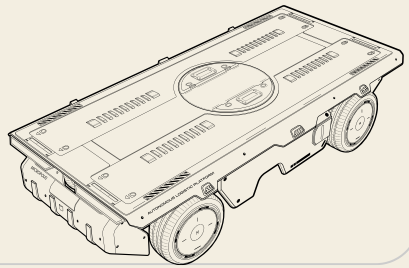


Supports **heavy-duty and inter-warehouse logistics operations**, moving cargo, equipment, parts, and supplies.

LOGX / MAX



W **2350** MM L **4400** MM H **1068** MM



Weight

2.4 TON

Max Speed

80 KM/H

NVIDIA-powered

NVIDIA

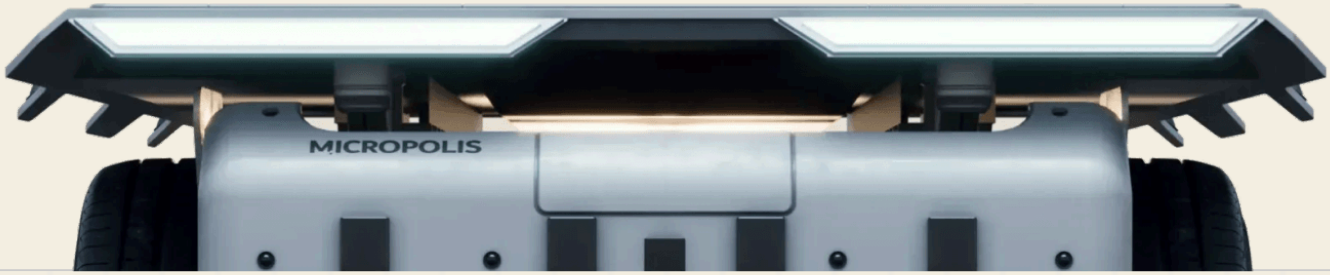
10h Battery

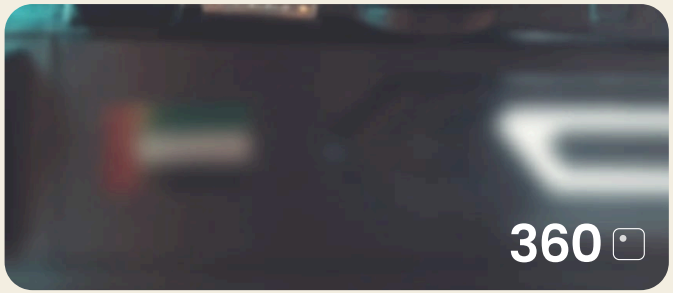
1.5 h Fast Charging

Built to carry, engineered to run all shift

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

L4 Autonomy
for gated communities and areas





Obstacle Detection

8x Automotive cameras

Payload
Up to

5 TON

4x In-Wheel Motors

Supported Connection

4G/5G WIFI RADIO

Double
Steering

Crab
Steering

Operating Temperature

-10 ~ 70c

Safety Lights

Status communication

A light bar around the platform tells everyone nearby what the LOGX Max is about to do — stopping, turning, loading — so people and forklifts share the yard with it safely.

LOGX MAX

Five tonnes, every hour

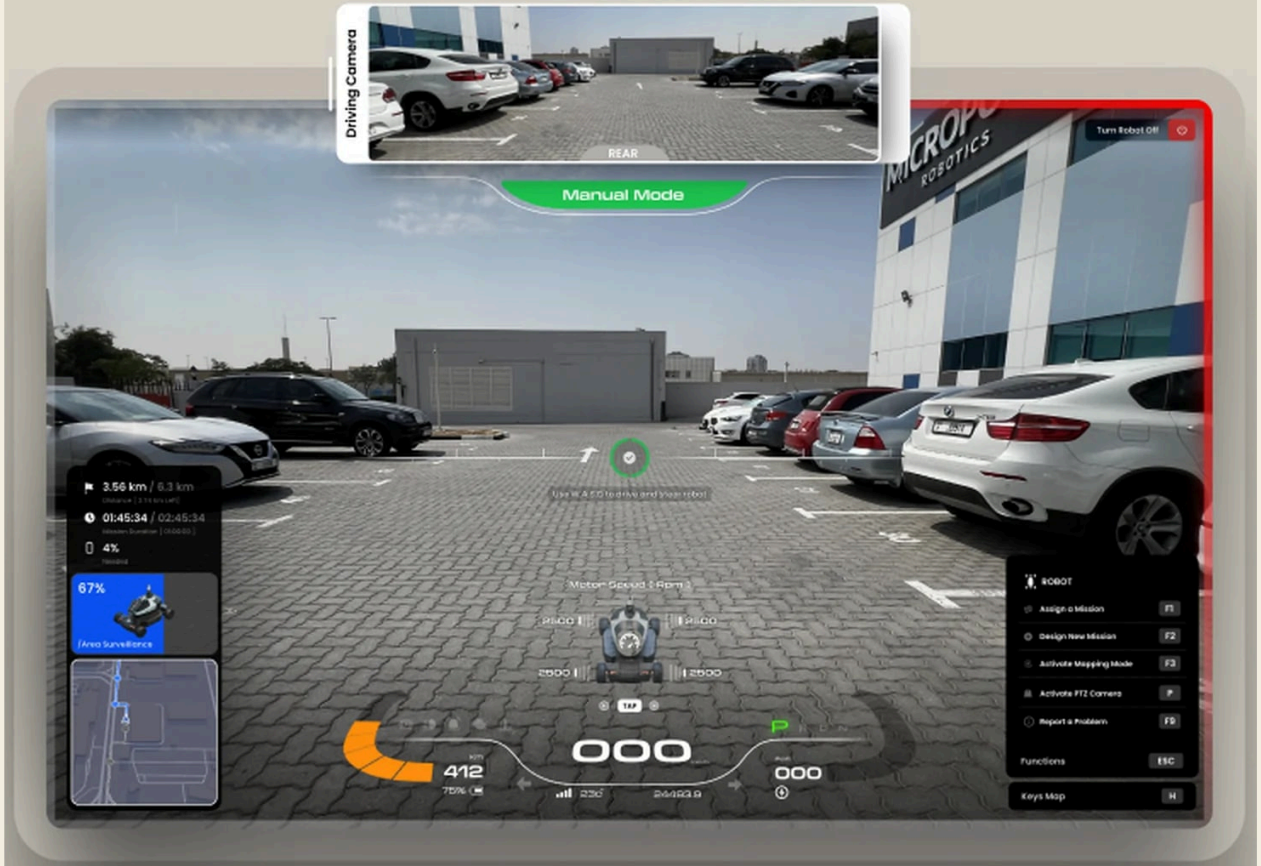
A 2.4-tonne platform carrying up to five tonnes for a ten-hour shift, back on the road after a 1.5-hour fast charge — the LOGX Max keeps cargo moving between warehouses around the clock.

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

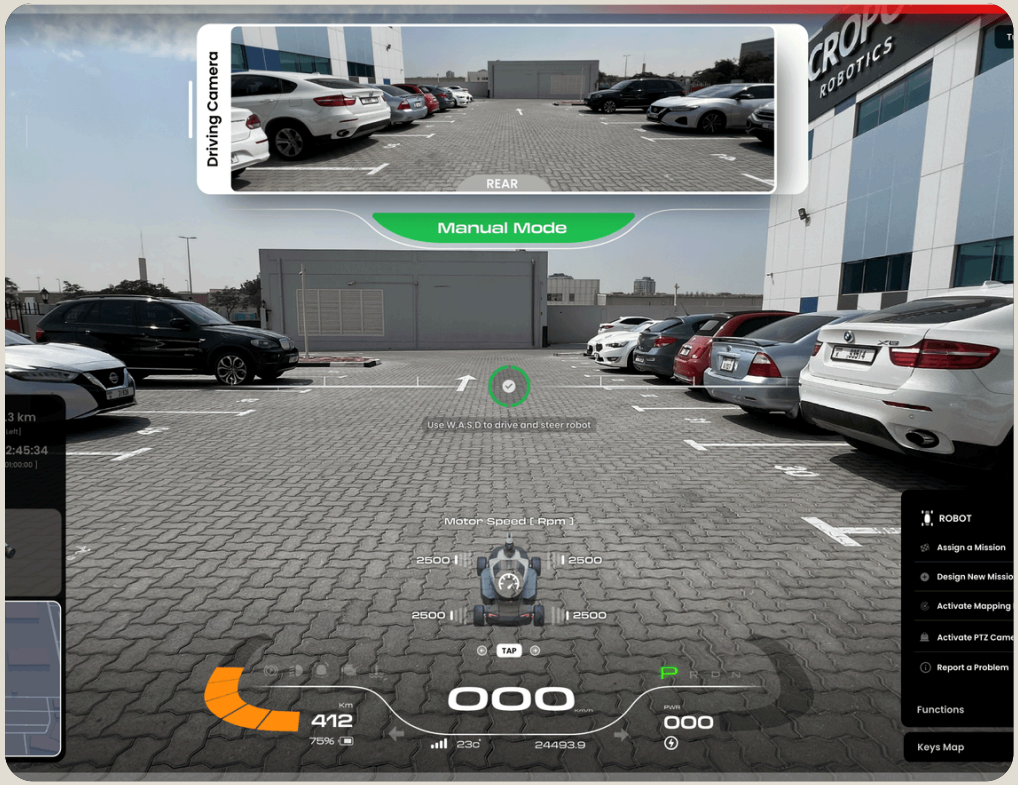
04 **Fleet Manager** · Large Operation

05 **Micro OS** · Integrated HW

Tele Operator Remote Control

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

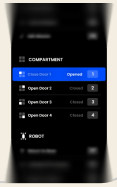
TELE OPERATOR Live drive screen



Real-time **telemetry**

Onboard systems

Control

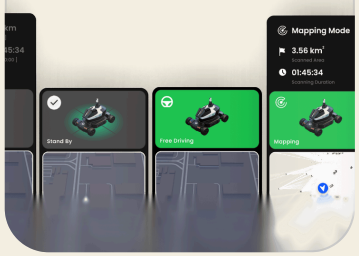


System **Health**

Live surround view

Safety warnings

Driving modes



Real-time **streaming**

Low latency

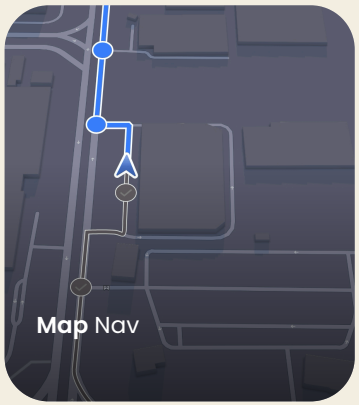
5G RADIO

~250 ms

PTZ Camera control

Multi-support RC inputs

- Keyboard
- Joystick
- Customized Station



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

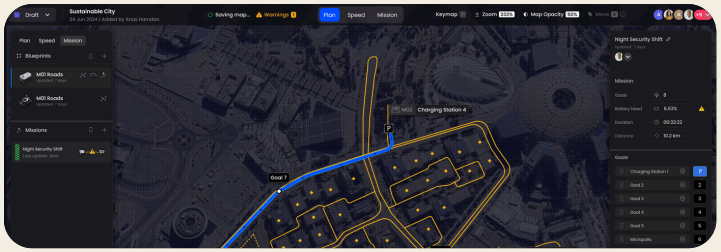
Enables operators to **design, schedule,** and **manage** autonomous vehicle missions

FLEET MANAGER Scale up with fleets

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

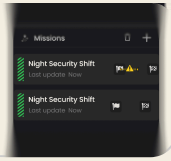
MICRO OS Orchestration behind the scene

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



Route design

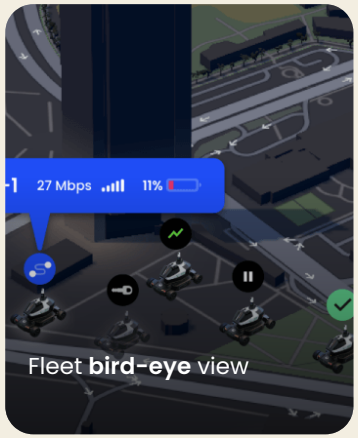
Mission schedule



Add-ons

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

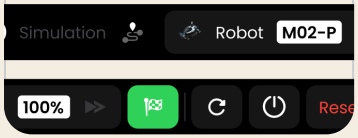
Rule-base goals



Custom **Integrations**

- ERP systems
- Assets management
- Fleet management

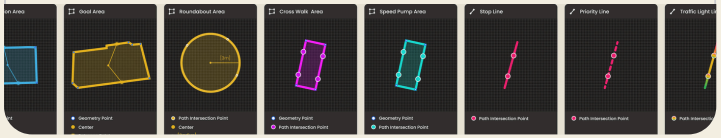
Mission simulation



Seamless robot **onboarding**

Maintenance Schedule

Custom traffic rules



Purpose-built

Linux distribution

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

Robotics at the edge

GPU accelerated

CUDA · cuDNN · TensorRT · ROS 2

Every **interface** native

Kernel-level drivers

- CAN bus
- Serial & USB
- Ethernet

Fail-safe updates

Over the air

ENCRYPTED · VERIFIED

Built for **developers**

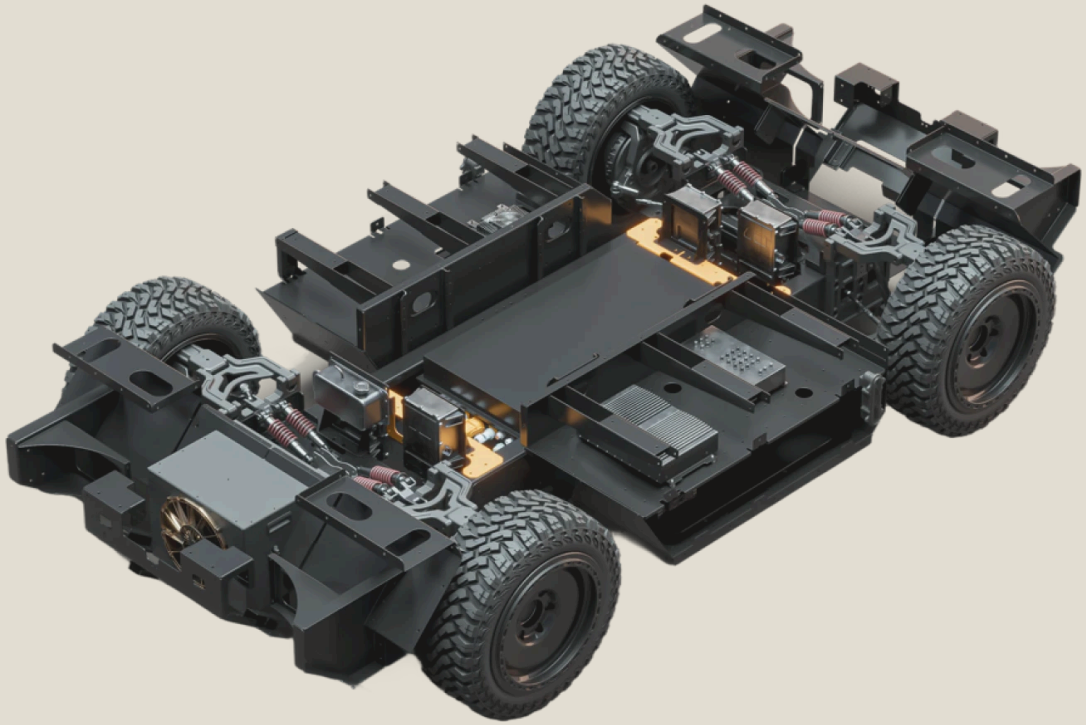
- SDK cross-compiled per robot
- Develop and test with no hardware in hand

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™** · Mega Size Urban

02 **Mechanics** · Drive · Steer · Brake

03 **Electronics** · Vehicle control units

04 **Energy** · Battery architectures

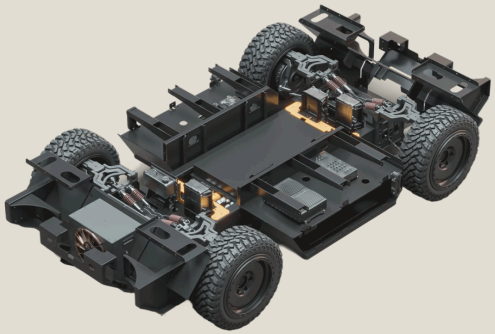
RELATED HARDWARE PLATFORM

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

Under the LOGX Max



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

FULL SIZE OFF-ROAD

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.

Drive

4x in-wheel

Payload

up to 5 t

Fast charge

1.5 h

Max speed

80 km/h

Mechanics Drive, steering & braking

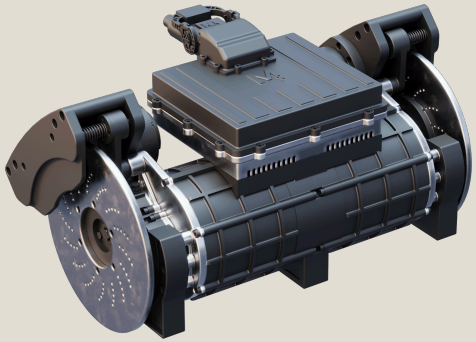
Proprietary **electric drive, steering and braking** — one vertically integrated mobility architecture, designed and validated in house

In-wheel drive
Hub motors · 4 to 22 kW

- Independent wheel control
- Torque vectoring
- Compact packaging

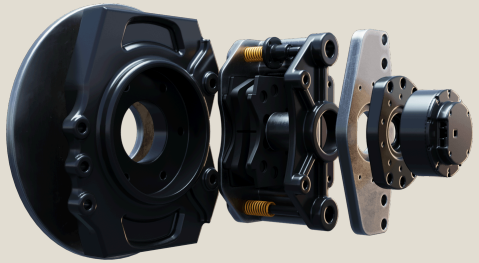
Mid-drive
High-torque units · 10 to 35 kW

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



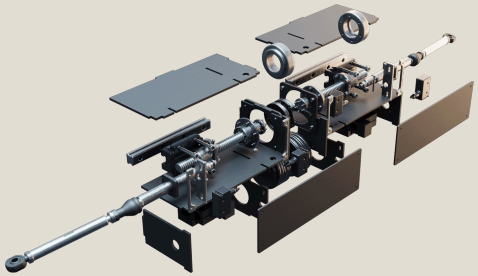
Brake-by-wire
Electric braking

- 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®

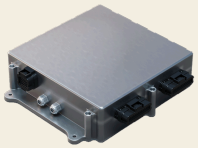
- Real-time control algorithms
- Multi-protocol communication
- Full sensor acquisition

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

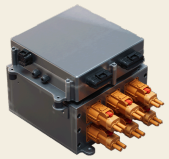


Power distribution
PDU 1.0®

- One source, every circuit
- Integrated circuit protection
- Ruggedized connectors

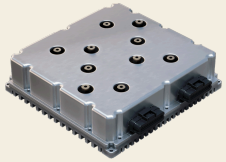
HV distribution
HV-PDU 1.0®

- 400–800 V DC routing
- Overcurrent protection
- Automotive-grade connectors



Motor drive
MDU 1.0®

- BLDC commutation
- Controlled three-phase output
- CAN-commanded torque



Energy Purpose-built power

Purpose-built battery architectures — $LiFePO_4$ chemistry, smart BMS and liquid cooling, engineered for mission-critical reliability

The **battery** platform
$LiFePO_4$ · 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

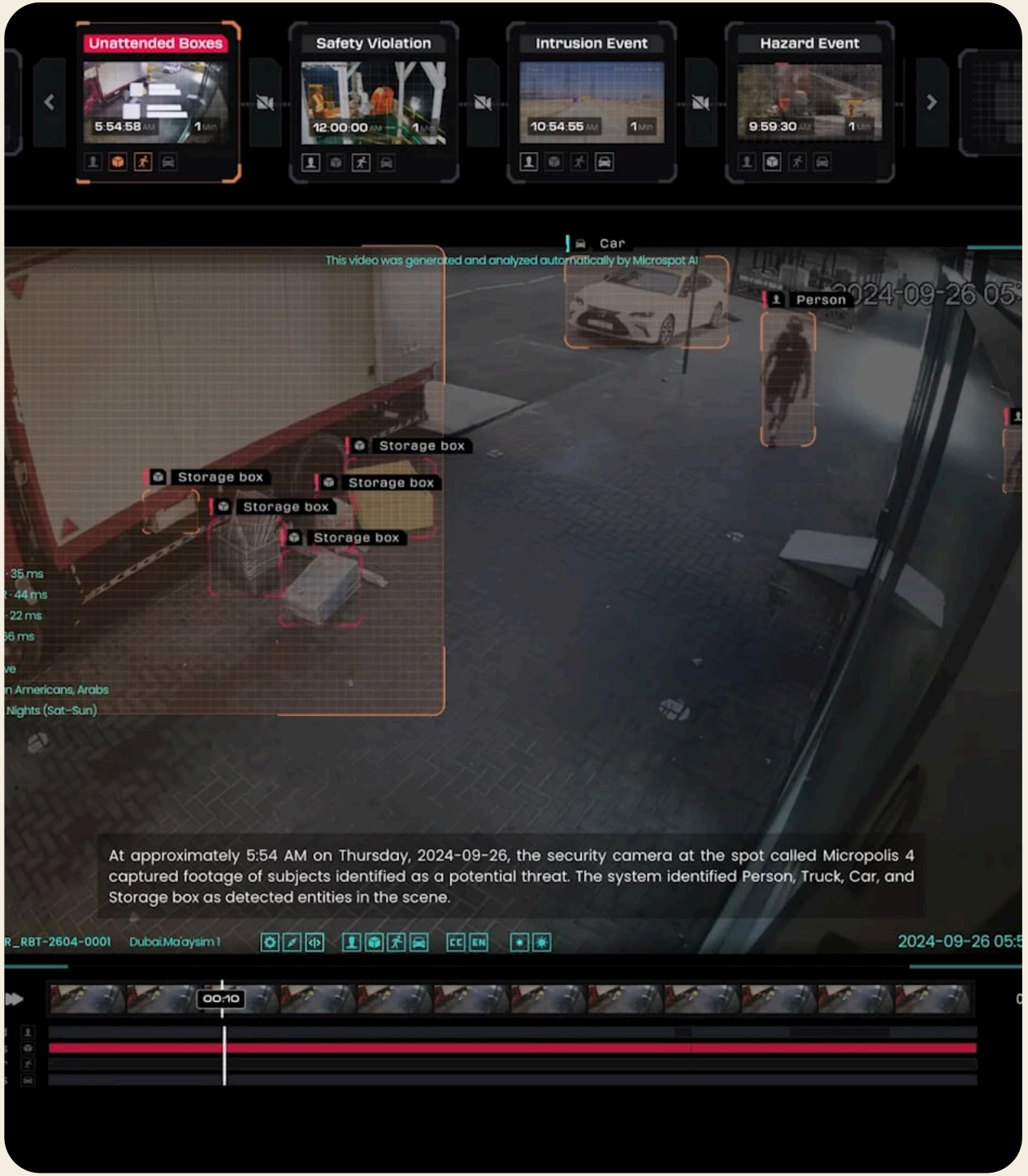
60 L TANK
REMOTE START

04

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.



INTELLIGENT SPOT

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

Observes
Identifies
Interprets
Correlates
Documents

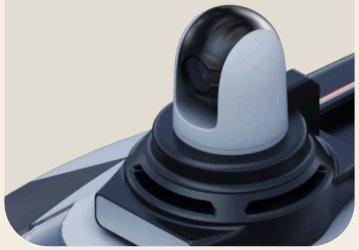
Connect

CCTV

Connect

IoT SENSORS

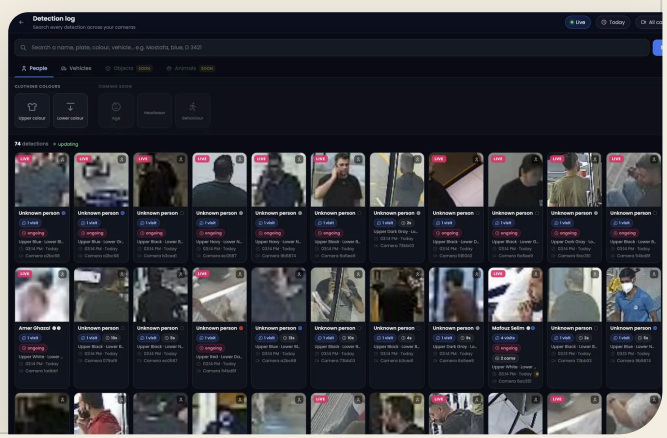
Micropolis Robots PTZ
Fully integrated



NVIDIA-powered
EDGE Computing

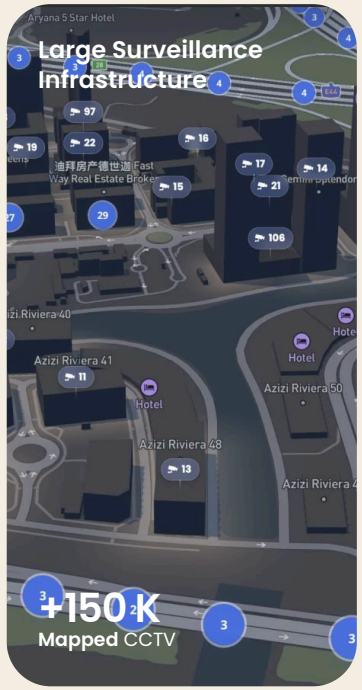
NVIDIA

Intelligent search
Historical detection logs



Area tree
Folder organizer

Large Surveillance Infrastructure



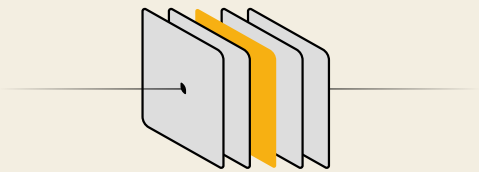
EDGE Processing

Command Support

Add-ons

+ Customized event detection
+ Smart incident reporting app
+ SOP workflow builder

5 AI layers
One platform



The intelligence behind the scene

Layered technology, performance focused

Layer 01 — Perception Layer

What is present in the scene?

Scene Intelligence™

Understanding the whole scene — not just the objects in it.

Behavioral Intelligence™

Recognising what people are doing, not merely that they are there.

Crowd & Density Intelligence™

Measuring crowds in metres, not pixels.

Vehicle & Access Intelligence™

Every vehicle recognised, verified, and accounted for.

Layer 02 — Identity Layer

Who is present, and have we seen them before?

AI Identity Intelligence™

Knowing who is present — reliably, and with restraint.

Adaptive Face Resolution™

Recognition that knows when not to guess.

Persistent Identity Continuity™

Recognising the same person — even when you have never met them.

Identity Fabric™

One identity, consistent across every camera and every site.

Layer 03 — Reasoning Layer

Does this matter, and how much?

Intelligent Threat Assessment™

Separating what matters from what merely moved.

Smart Event Correlation™

One incident. Not four hundred alerts.

Policy-Aware Sensitivity™

Security policy as configuration, not custom engineering.

Layer 04 — Response Layer

What do operators see, and what can they prove?

Real-Time Situational Awareness™

See what the system sees, as it sees it.

AI Evidence Builder™

Every incident, documented to evidentiary standard — automatically.

Layer 05 — Foundation Layer

How does it run affordably and sovereignly?

Adaptive AI Processing™

Run only what the mission requires.

Enterprise Edge AI™

The full platform, wherever it needs to run.

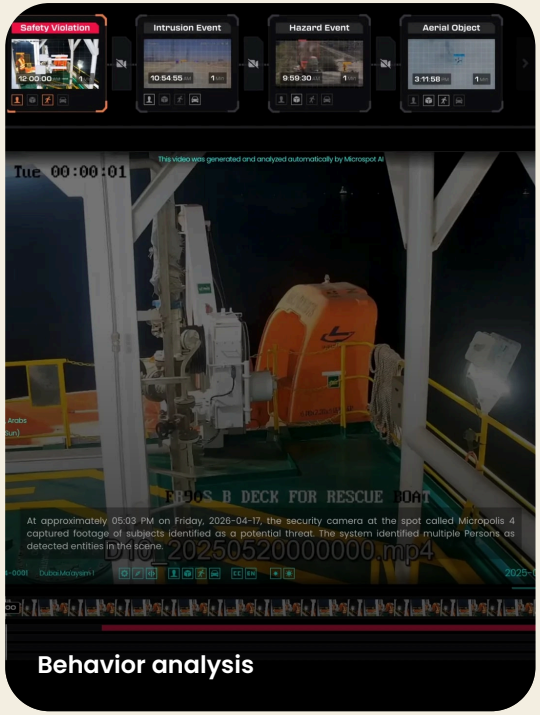
Sovereign Deployment Architecture™

Your data, your infrastructure, your jurisdiction.

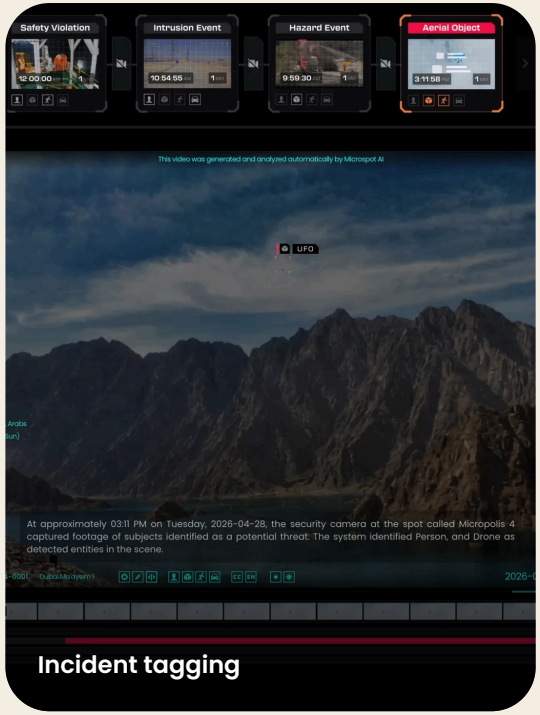
Intelligence in action

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

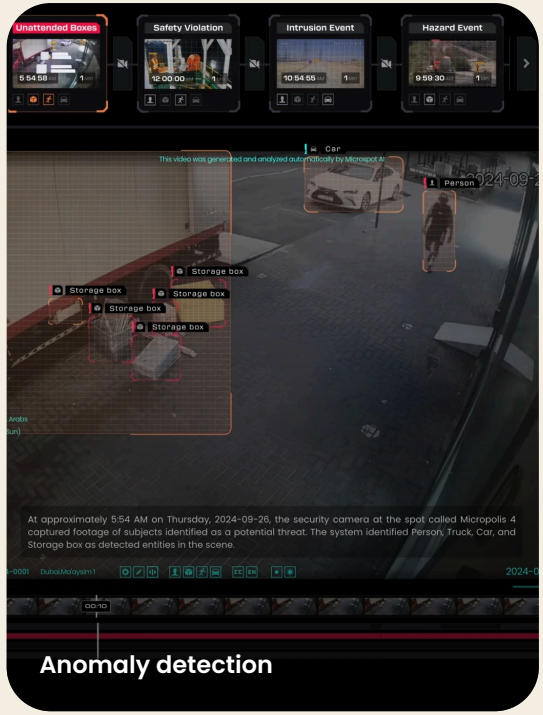
Real-time monitoring



Behavior analysis



Incident tagging



Anomaly detection

TUNED TO THE LOGX MAX'S MISSIONS

Mission

Yard safety

- Behavioral Intelligence™
- Crowd & Density Intelligence™

People and forklifts read as they move, distances measured in metres.

Mission

Cargo custody

- AI Evidence Builder™
- Scene Intelligence™

Every pickup and drop documented to evidentiary standard.

Mission

Site access

- Vehicle & Access Intelligence™
- Policy-Aware Sensitivity™

Every vehicle recognised; site policy as configuration.

Mission

Fleet oversight

- Real-Time Situational Awareness™
- Enterprise Edge AI™

Operators see what every platform sees, on your own infrastructure.

Connects

CCTV · IoT sensors · Micropolis robots

Inquire about your cases

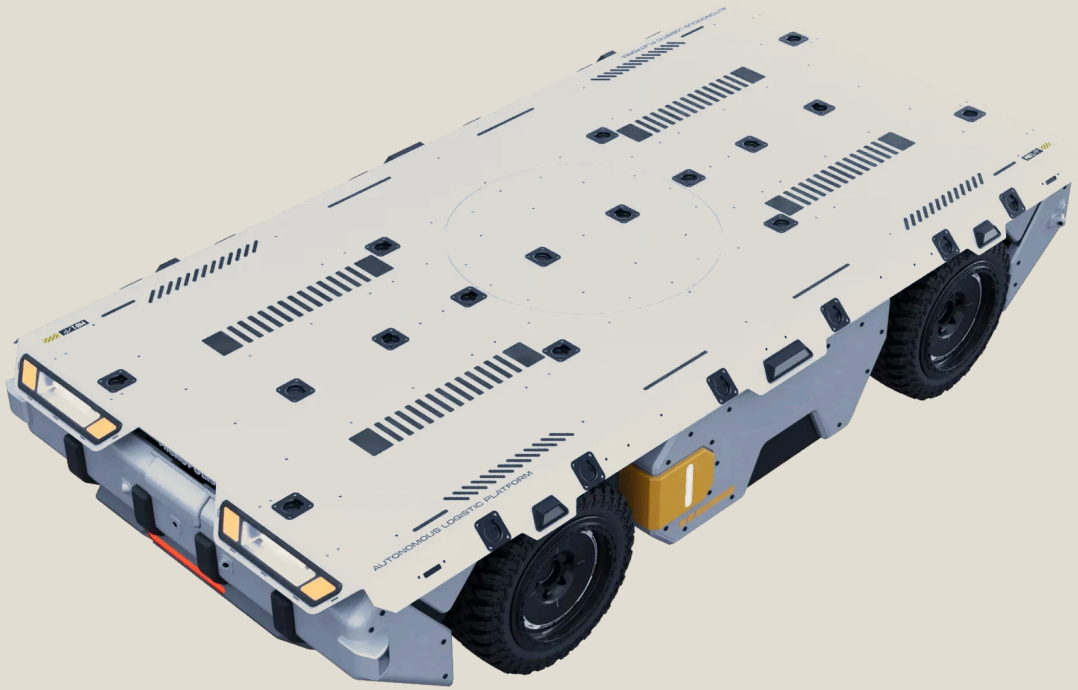
Turn live video, sensor data, and robotic patrol inputs into actionable operational awareness.

05

SPECIFICATIONS

Every figure, on one page

The full specification of the LOGX Max, and how to reach us.



LOGX Max at a glance

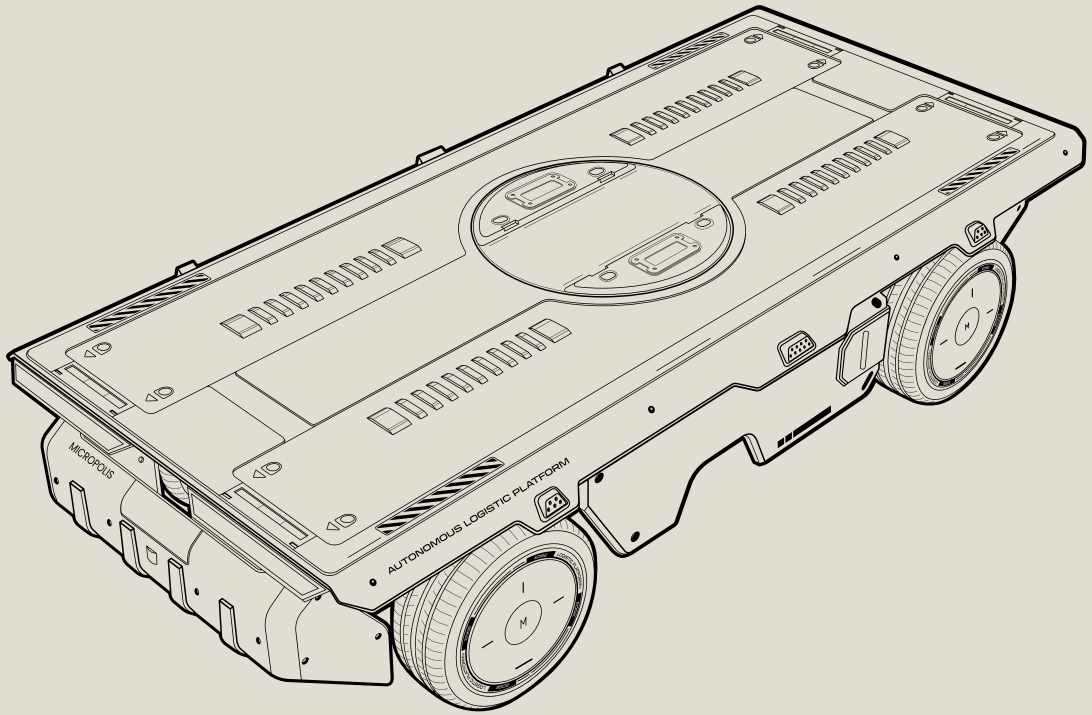
Specifications are subject to change without notice. Figures marked “software limited” are configurable per deployment.

Dimensions (W × L × H)	2350 × 4400 × 1068 mm
Weight	2.4 ton
Max Speed	80 km/h
Compute	NVIDIA-powered
Battery	10h runtime · 1.5 h Fast Charging

Steering	Double & Crab steering
Obstacle Detection	360° · 8x Automotive cameras
Payload	5 ton
Drive	4x In-Wheel Motors
Supported Connection	4G/5G · WIFI · RADIO

Operating Temperature	-10 ~ 70 c
Braking	Brake-by-wire, regenerative
Autonomy	L4 · Micro Pilot
Hardware platform	M-Platform™ Mega Size Urban
Remote control	Tele Operator · 5G / radio, ~250 ms

LOGX / MAX



W **2350** MM L **4400** MM H **1068** MM

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ROBOTICS

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