



Flo Mobility Pvt Ltd

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MATERIAL MOVEMENT ROBOT PRODUCT INFORMATION BROCHURE



About the Machine



The MMR v4.1 is a rugged, fully autonomous **4x4** robotic vehicle built for industrial material handling. Its modular chassis and **all-terrain** mobility support customisable payloads, making it ideal to operate for warehouses, construction, agriculture, and other harsh environments requiring efficient, low-intervention transport. The side doors and back door can be opened for easy loading. Two electric actuators can lift the dumper for easy unloading.

Main Features

System Voltage	:	24-30V
Machine Safety	:	Emergency Pushbutton
Weight Limit	:	500kg
Operation	:	Remote Control and Autonomous
Continuous Operation	:	6-8 Hours with full load
Battery Charging Duration	:	3-4 Hours

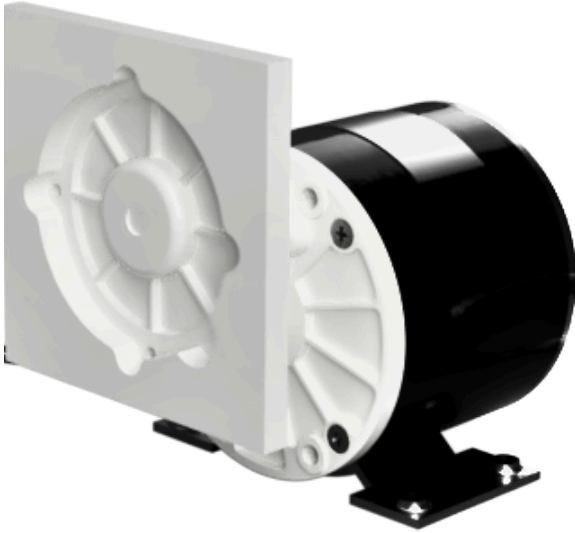
DUMPER LIFTED BY ELECTRIC ACTUATOR



SIDE DOORS FOR EASY LOADING/UNLOADING



Electrical and Power Info



Motor with Gearbox x 4

Voltage: 24V DC

Output: 350 Watt

RPM: 60

Type: PMDC

Rated Current: 19.2A

Gear Ratio: 1 : 9.78

Torque Constant: 11 nm (110 kg-cm)

Torque stall: 55 nm (550 kg-cm)

Compatible Sprocket: 9-tooth 1/5" chain

Electric Actuator x 2

Voltage: 24V DC

Rated RPM: 320

No Load RPM: 300

Rated Current: 5.5A

Rated Weight: 0.5 Ton

No Load Current: 0.8A



Battery with Charger x 1

Configuration: Li-ion (8S) Cells

Nominal Voltage: 25.6V

Peak Voltage: 28.8V

Capacity: 105 Ah

Battery Management: Smart BMS with Mobile App

Battery Safety: MSDS and Certification Available

Charger: 28.8V Li-Ion Charger with AC Plug



Remote-controlled operation

TOUCHSCREEN REMOTE-CONTROL WITH RF-BASED OPERATION AND TELEMETRY MONITORING

Monitor voltage, battery percentage, temperature, and live errors/warnings on the Remote's display

FS-i6S Remote Control

No. of Channel: 10

Frequency: ~2.4 GHz

Bandwidth: 500 KHz

Band Number: 135

Transmitting Power: <20 dBm

2.4G Mode: AFHDS 2A

Modulation System: GFSK



FS-iA10B Receiver

No. of Channel: 10

Frequency: ~2.4GHz

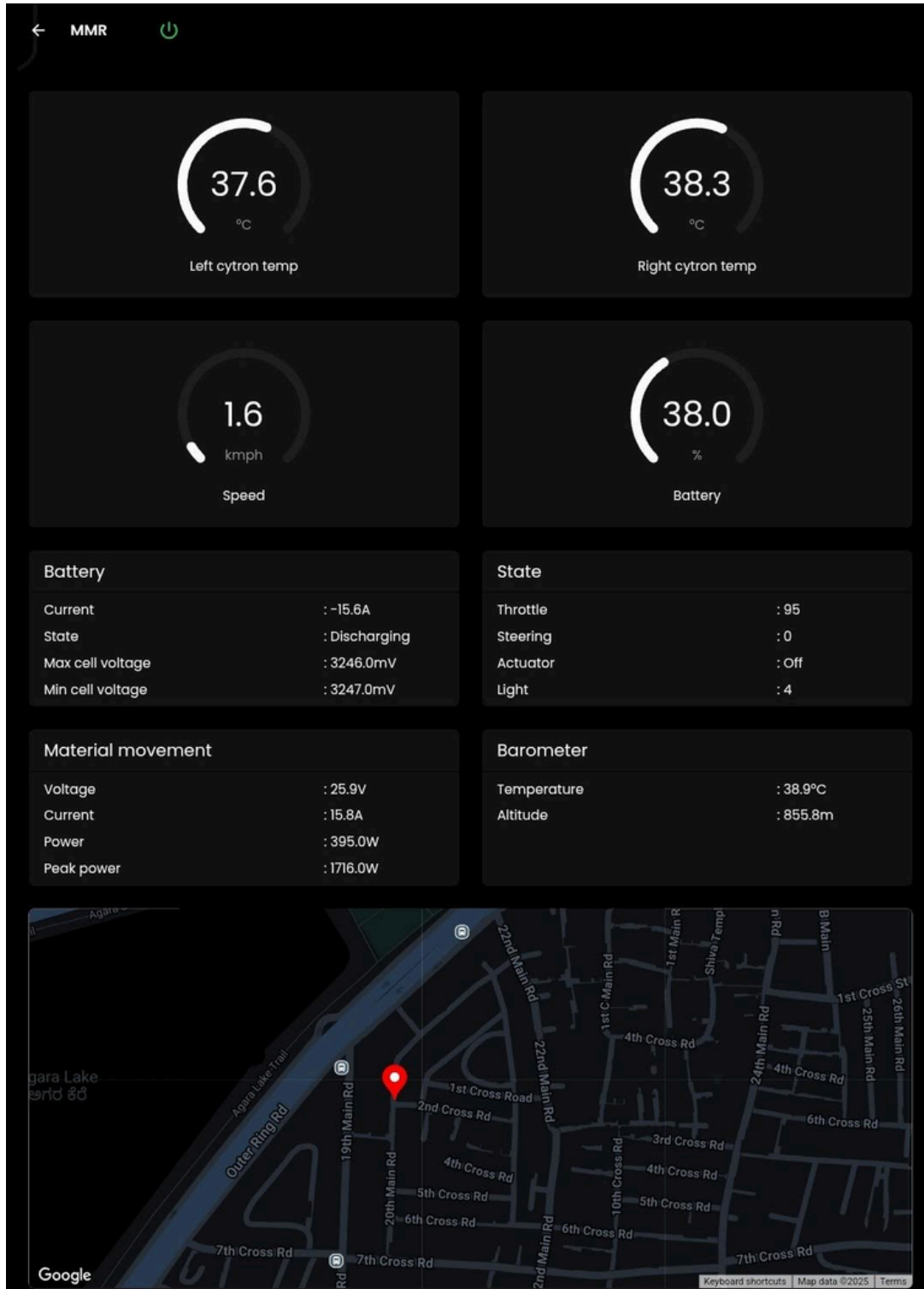
Band Number: 140

Receiver Sensitivity: -105 dBm

2.4G Mode: AFHDS 2A

Modulation System: GFSK

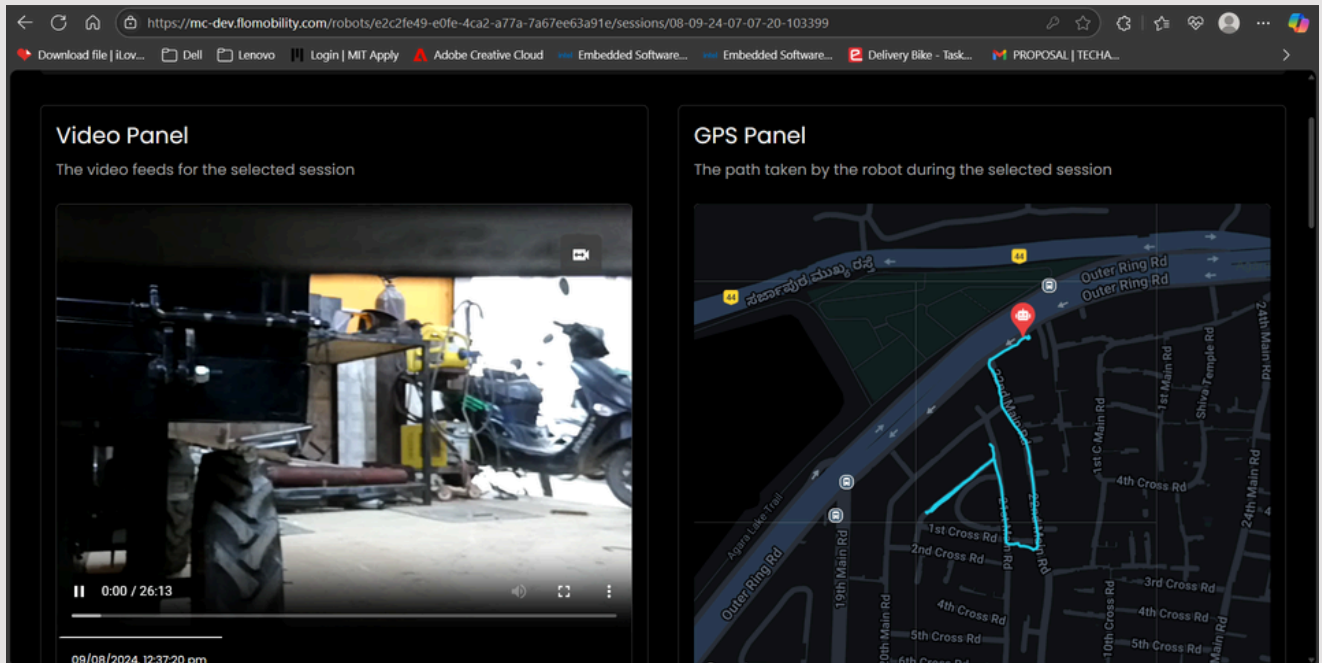
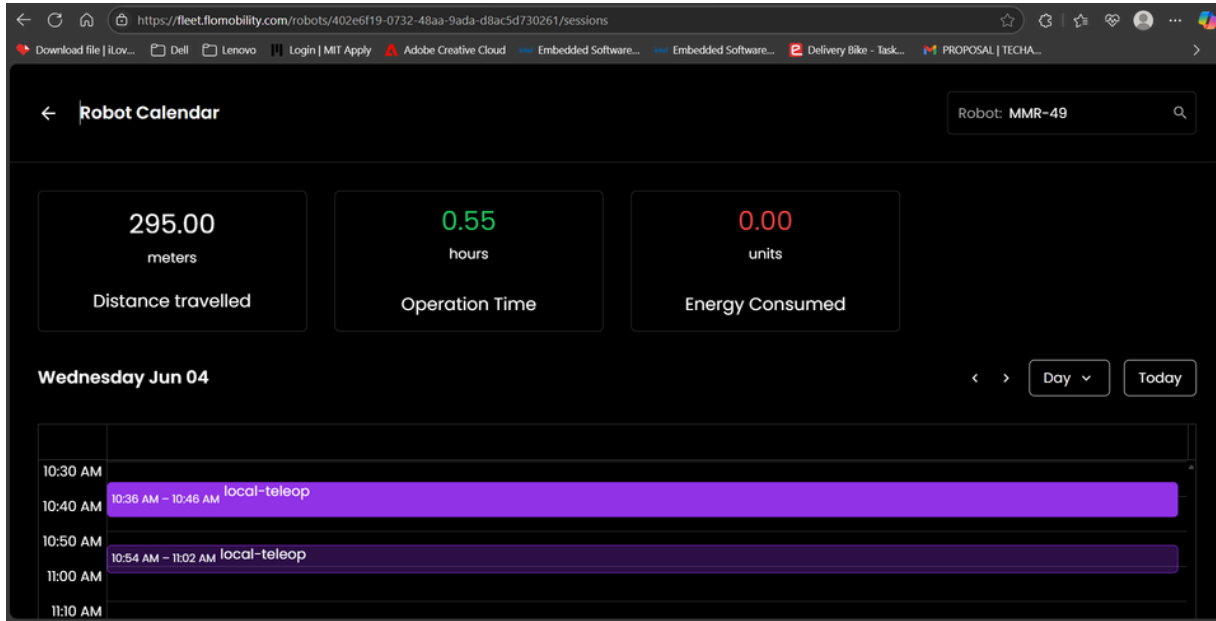
Live Fleet Monitoring



LIVE DASHBOARD

Monitor your machines live

Fleet Management



ANALYTICS AND SESSION DATA

Analyse your machines' daily, weekly, and monthly operations

Variants

REGULAR FLEET

The machine is operated by a trained operator using a remote controller; users can monitor data on our Web Dashboard

SALIENT FEATURES

- Voice-accessible actions/alarms
- Light for evening operation
- PAN India Wi-Fi Connectivity
- Telemetry Monitoring
- GPS-Integrated
- Battery Monitoring
- Built-in Barometer
- Integrated IMU
- Remote-controlled operation

AUTONOMY FLEET

The machine can be operated by a trained operator using a remote-controller, as well as by giving fixed-path missions using our Web Dashboard or integrate it with Google Assistant voice commands

SALIENT FEATURES

- All Regular Fleet Features
- High-accuracy IMU/accelerometer
- Base Station with 20km range
- GPS-RTK Accuracy of 0.1 cm
- Machine POV Video Feed
- Camera-based obstacle avoidance
- Control with wi-fi dashboard

Purchase Options

RENT

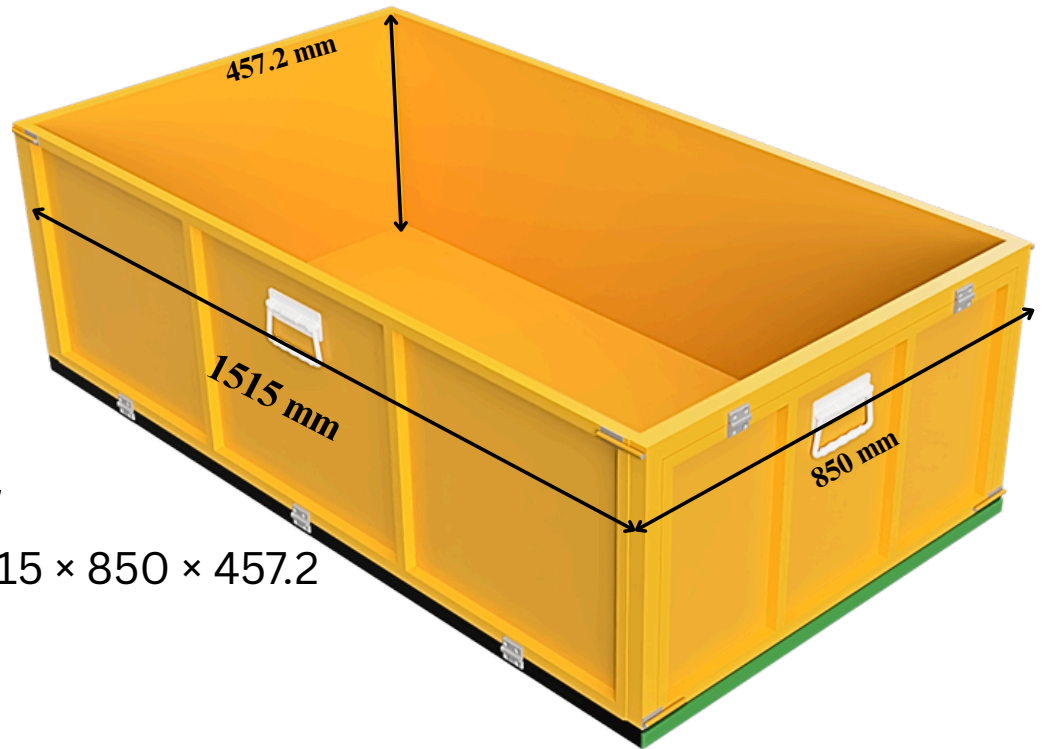
Comes with a trained operator and timely maintenance service

BUY

Permanent ownership of machine with a 1-year warranty

**MULTIPLE ELECTRICAL AND MECHANICAL
CUSTOMIZATION OPTIONS AVAILABLE**

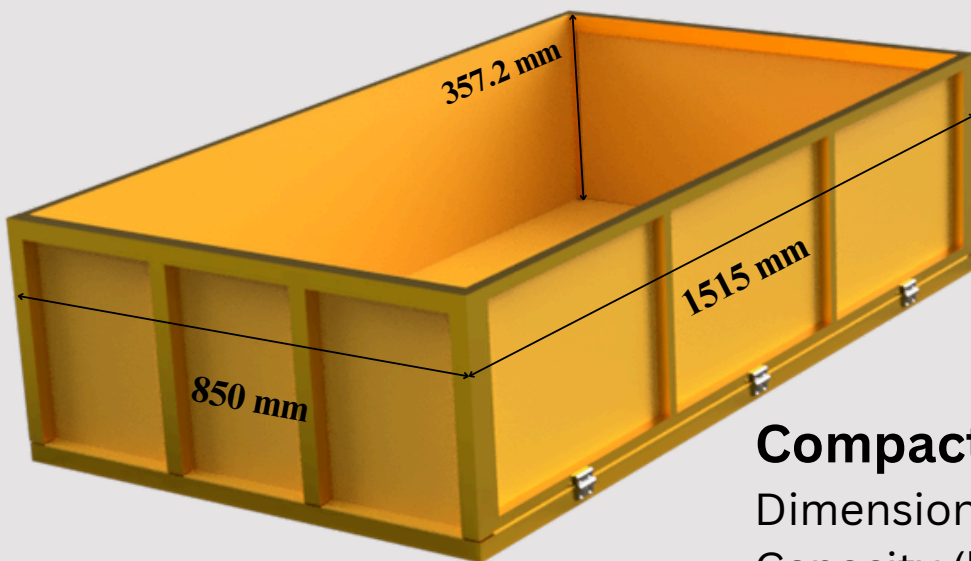
Dumper Variants



Standard Dumper

Dimensions (mm): 1515 × 850 × 457.2

Capacity (l): 588.8



Compact Height Dumper

Dimensions (mm): 1515 × 850 × 357.2

Capacity (l): 460

**MULTIPLE CUSTOMIZATION OPTIONS
AVAILABLE WITH FOR DUMPER SIZE**



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IAF Accredited

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