

# **Adaptive AgroTech - Sensor Mate Rover**

## **Autonomous ROS-Compatible Mobile LoRaWAN Sensing Robot**

Sensor Mate Rover is a compact autonomous robotic platform designed for precision agriculture, environmental monitoring and agricultural research.

### Key Features:

- Autonomous four-wheel mobile sensing platform
- ROS-compatible architecture
- LoRaWAN long-range communication
- Remote monitoring and data collection
- Modular sensor integration
- Field deployment capability

### Applications:

- Precision agriculture
- Livestock and barn monitoring
- Greenhouse and orchard monitoring
- Agricultural research and field trials
- Environmental mapping
- Robotics and AI research

### Supported Sensors:

- Temperature
- Relative humidity
- CO2 and gas sensors
- Leaf wetness
- Soil moisture
- Light intensity
- Pressure
- GPS/GNSS

### Technical Highlights:

- Rugged mobile chassis
- Weather-resistant enclosure
- Wireless connectivity
- Cloud and dashboard integration
- Long battery operation