



**XDC AUTONOMOUS  
SOLUTIONS**



**| FJD RM21 COMBO:  
ROTARY MOWER, LINE MARKER,  
AND AUTO COLLECTOR/DISPENSER**







# **FJD RM21** **ROBOTIC MOWER**

Mowing Redefined for Precision and Sustainability

# FJD RM21

The FJD RM21 Fully Autonomous Lawn Mower is the perfect solution for professional lawn care providers who demand efficiency and reliability. Designed for multiple scenarios, including sports fields and orchards, the RM Series features an intelligent control system, pure electric drive, and a large-capacity battery to maximize mowing efficiency, save time, effort, and cost. The pure electric design eliminates oil leaks and grass damage.

## TECH-DRIVEN LAWN CARE REIMAGINED



Centimeter Accuracy

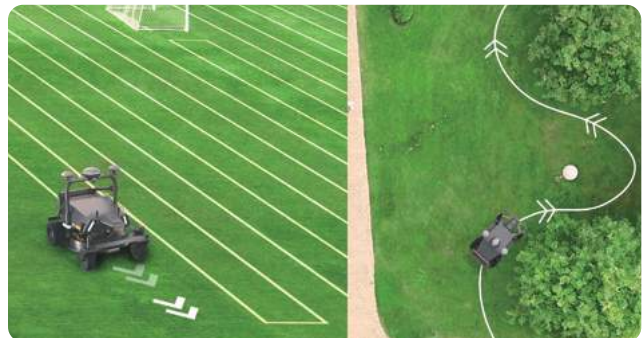
### ACCURATE AND EFFICIENT MOWING

With centimeter-level positioning accuracy, our mowers can precisely cut grass, reducing the need for overlap or missed areas. This results in faster and more efficient mowing.



### ONE-CLICK MULTI-FIELD MANAGEMENT

Our mowers can be used to mow multiple fields in a single task. This saves time and effort, making it easier to manage your property.



### SMART ROUTE PLANNING

Our mowers use built-in obstacle avoidance to automatically plan mowing routes. This helps to prevent collisions and damage, making mowing safer and easier.



### AUTOMATIC MOWING ON COMPLEX TERRAIN

Our mowers use LiDAR tech to create a 3D cloud point map of the terrain. This allows them to safely mow in complex areas, such as under trees or around obstacles.



# PROTECTION MEETS INNOVATION



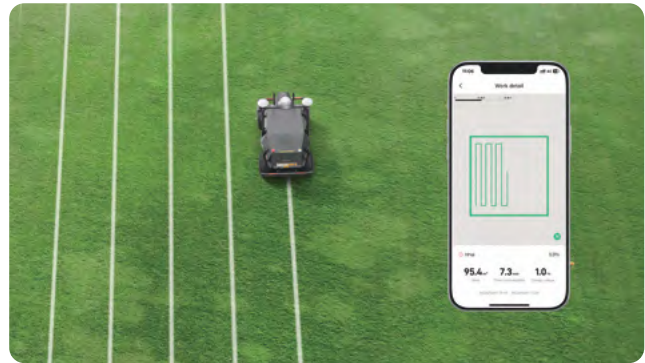
## 360° REAL-TIME OBSTACLE DETECTION

Uses LiDAR to detect surrounding obstacles without blind spots, with three distance modes to choose from, ensuring safety.



## COMPREHENSIVE PROTECTION

Our mower safeguards itself with collision bumpers and rain monitoring. We've got every angle covered for a safe and flawless operation.



## MAKE MOWING EASIER AND SMARTER

Our lawn mower app makes mowing easier and smarter by giving you the power to control your mower anytime, anywhere.

# RELIABLE PERFORMANCE



## NO MORE BATTERY ANXIETY

Automatically returns to the charging station for charging when the battery is low, without manual intervention, significantly improving work efficiency.



## NO MORE WORRY ABOUT CLIMBING HILLS

Climbing ability up to 20°, can handle more complex and changeable terrain.

# APPLICATION SCENARIO



# SPECIFICATION

<b>Weight (with 2 batteries)</b>	375lb / 170 kg	<b>Ground Speed</b>	0~3.7mph / 0~6 km/h
<b>Dimensions</b>	L52" * W34" * H40" L1330 * W857 * H1012 mm	<b>Max Operation Area per Three Days</b>	22 Acres / 90000 m <sup>2</sup> *
<b>Number of Blades</b>	1	<b>Max Operation Area per Charge</b>	3.2 Acres / 13000m <sup>2</sup> *
<b>Cutting Height</b>	0.8~5" / 20~127 mm	<b>Average Working Time</b>	5 h
<b>Cutting Width</b>	25" / 63 cm	<b>Maximum Gradeability</b>	≤20°
<b>Battery Capacity</b>	4 kWh	<b>Charging Time</b>	5 h
<b>Battery Voltage</b>	48 VDC	<b>Waterproof</b>	IPX4

\*Working area capacity is variable due to grass type, soil, cutting height and slope.





# **FJD LM01 LINE MARKER KIT**

# MAKE LINE MARKING EASIER

Perfect sports field lines don't happen overnight. It takes high precision marker to make your field the best it can be. The LM01 comes standard with a top-class navigation system that makes precise lines marked in minutes with an ultra-long battery life. With customizable maps and lines, this marking robot lets you get the results both players and spectators can enjoy in any soccer, rugby, and lacrosse field.

## HIGH PRECISION FROM START TO FINISH

A local base station provides stable signals to ensure every line is marked precisely on point.

- Achieve the highest possible marking accuracy.
- Reduce the risk of signal drift with super stability.
- Save money by eliminating the need to purchase additional NTRIP accounts.



## SAVE COSTS, INCREASE EFFICIENCY



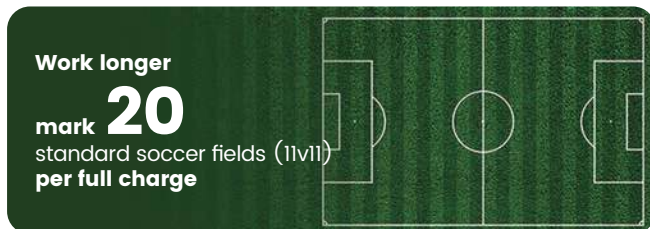
Save labor costs  
by up to

**90%+**



Reduce paint consumption  
by about

**50%+**



Work longer

mark **20**  
standard soccer fields (11v11)  
per full charge



Cover various  
sports fields

from soccer, rugby, to baseball



## INTUITIVE INTERACTION AND SIMPLE OPERATION

- Offer an array of built-in marking templates for quick and easy deployment.
- Support multiple map creation methods to meet different marking needs.
- Identify the starting point automatically for marking without manual intervention.
- Resume marking from where is left off for continuous workflow.



# SAFE AND RELIABLE

Provide dual protection of 360° laser radar monitoring and physical anti-collision, eliminating your safety concerns about unmanned marking.



# CONFIGURATIONS



LM02 (Only Marking)

RM21+LM01 (Marking+Mowing)

## Hardware

Base Station



Blade Disc



Charging Station



Portable Charger



Lithium Battery

1×2kWh

2×2kWh

## Feature

Est Marking Time per Full Charge

5-6h

10h

Mowing



Charging Mode

Manual charge

Automatic charge

Screen Plate Auto-Lifting



Resume Spraying



Auto-locate Starting Point



360° Monitoring

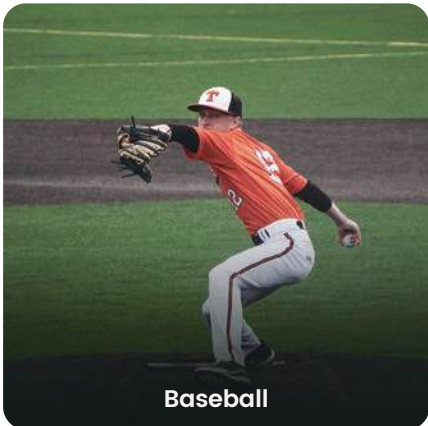


Paint Level Alarm





# APPLICATION SCENARIO



## SPECS

LM02 Weight (No Blade Disc)	157 kg	Rated Voltage	48 V DC
RM21+LM01 Weight (With Blade Disc)	187 kg	Rated Power	150 W
Speed	2 km/h	Rated Current	3 A
Paint Capacity	25 L	IP Rating	IPX4
Marking Width Range	5-17 cm	Est Marking Time per Full Charge	5-6h
Nozzle Height	3-8 cm	Working Temperature	5-35 °C

# FJD GC31

## GRASS COLLECTION KIT

- ✓ Automatic Grass Collection & Disposal
- ✓ Unique Lawn Striping
- ✓ Artificial Turf Cleaning
- ✓ Unmanned Leaf Collection



### AUTOMATIC GRASS COLLECTION

Collect grass clippings and debris from your lawn automatically, eliminating the need for manual cleanup.

### HANDS-FREE GRASS DISPOSAL

Carry collected grass clippings and debris to a designated location for disposal, keeping your lawn impeccably tidy without effort on your side.

### UNIQUE LAWN STRIPING

Create alternating light and dark stripes on the lawn through precise control, aligning with the UEFA standards for sports fields while adding a touch of visual charm.

### ARTIFICIAL TURF CLEANING

Integrate RTK and LiDAR navigation technology for high-precision unmanned cleaning operations, making it a breeze to maintain both outdoor and indoor artificial turf.

### UNMANNED LEAF COLLECTION

Leverage advanced intelligent technology to automatically collect fallen leaves, effortlessly maintaining a neat and attractive appearance for your lawn and yard.

### ULTRA-QUIET OPERATION

Operate silently without noise or harmful fumes, promoting a tranquil lifestyle that benefits your family and neighbors in the community.

### APPLICATION SCENARIOS

(1) Mowed Grass Collection on Sports Fields; (2) Artificial Turf Cleaning; (3) Leaf Collection on Flat Areas.

GC31 Weight	100 kg	Max Travel Speed	3 km/h
RM21 +GC31 Weight	270 kg	Max Single Collection Volume	150 L
Dimensions	1260x960x740 mm (49.6x37.8x29.1 inches)	Max Climbing Ability	≤8°
Drive Mode	Electric	IP Rating	IPX4
Number of Roller Brushes	1	Rated Working Voltage	48 V
Roller Brush Rotation Speed	300/400/500 rpm	Rated Working Power	750 W
Grass Collection Height	20–50 mm	Rated Working Current	15.6A
Grass Collection Width	80 cm (31 inches)	Operating Temperature	0–45°C

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