FJD RM21

Multi-Functional Robotic Mower

All-in-One Solution for a New Era of Turf Care

The FJD RM21 is a powerful, versatile robot that makes field management simple. Through quick setup with different attachments, it gets more done with one machine, including mowing, line marking, grass collection, and ball picking.

This versatility provides efficient and cost-effective operations across sports fields, golf courses, and sod farms.

LM01 LINE MARKER KIT

GC01 GRASS COLLECTOR KIT

BP01 BALL PICKER KIT

DB01 DEW BRUSH KIT

SMART CONTROL, HASSLE-FREE PERFORMANCE

Intelligent Path Planning
Plan optimal routes automatically within a defined work area, ensuring your turf is perfectly maintained.

Multi-Zone Management
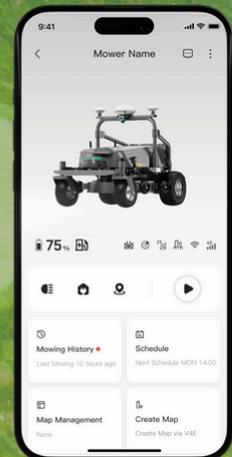Run a single task across multiple zones—ideal for large golf courses and stadiums.

Fleet Management
Assign tasks from the cloud and enable multiplerobots to work together, completing large-area jobs with ease.

Up to 93,600 m² in 3 Days

Remote App Control
Monitor status, create tasks, and manage operations on your phone anytime, anywhere.

ZONE 1

ZONE 2

9:41

Mower Name

75%

Mowing History
Last Mowing 10 hours ago

Schedule
Next Schedule MON 14:00

Map Management
None

Create Map
Create Map via V4E

WORRY-FREE OPERATION, ALL-DAY SAFETY

No Signal Worries

Utilize RTK and LiDAR fusion to deliver reliable performance, even under trees or in areas with weak signals.

Multi-Layer Safety Protection

Combine real-time 360° LiDAR obstacle detection with front and rear physical bumpers, ensuring safer autonomous operation.

Specifications

Complete Unit	
Weight	170 kg (375 lb)
Dimensions	1330×853×980 mm / 52.4×33.6×38.6 in.
IP rating	IPX4
Operating temperature	0-45℃
Cutting System	
72-hour max mowing area	Fast charging mode: 108,000 m^2(26.7 acres)
	Standard charging mode: 93,600 m^2 (23.1 acres)
Max mowing area per charge	12,000 m^2 / 3 acres
Cutting height	20–127 mm / 0.8–5 in.
Cutting width	635 mm / 25 in.
Max climbing ability	20°
Recommended working slope	15°
Travel speed	0–6 km/h / 0–3.7 mph
Battery & Charging	
Battery capacity	4 kWh
Max working time	5h
Charging time	Standard: 5h
	Fast charging: 3h

Notes: 1. Use the lowest setting 20 mm (0.8 inches) only on flat surfaces. For uneven ground, set the height to at least 30 mm (1.2 inches).

2. Working area depends on grass type, soil, cutting height, and slopes.

COMBO 1 – RM21 + LM01 LINE MARKER KIT

Paired with the LM01, the RM21 delivers exceptional line-marking precision and efficiency across sports fields, greatly reducing labor and paint usage.

Less Input, Greater Output

Reduce paint usage
by **50%+**

Cut labor costs by
up to **90%**

Mark up to **20** full-size
fields per charge

EASY TO USE, BUILT FOR MULTIPLE FIELDS

Seamless Line Marking Resume

Whether switching fields or pausing to refill paint, the robot resumes precisely where it left off—no overlapping, no wasted paint.

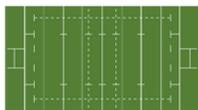## One-Tap Autonomous Operation

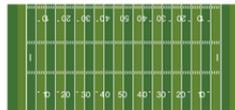Start the daily line-marking workflow with one tap —no manual intervention required.

APPLICATION SCENARIOS

Soccer

Rugby

American Football

Baseball

Lacrosse

Others

LM01	
Weight	68 kg (150 lb)
Dimensions	1515×853×1051 mm / 59.6×33.6×41.4 in.
IP rating	IPX4
Max marking speed	3 km/h / 1.9 mph
Paint tank capacity	25L / 5.5 gal
Line width range	50–170 mm / 2–6.7 in.
Nozzle height	30–80 mm / 1.2–3.1 in.
Operating temperature	5–35°C
Max marking time per charge	20h

COMBO 2 – RM21 + GC01 GRASS COLLECTOR KIT

Combined with the GC01, the RM21 handles lawn maintenance in a single, fully automated flow: it cuts the lawn, collects the clippings, and dumps the waste or leaves.

AUTONOMOUS TURF CLEANING

Automated Grass Collection & Disposal

Collect grass clippings and leaves as it cuts, or run a smart sweep right after mowing—bringing mowing and cleanup in one smooth process.
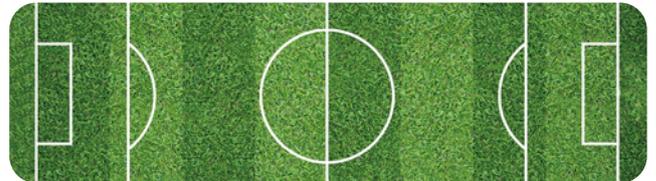

Artificial Turf Cleaning

Clear debris from both natural and artificial turf automatically, so you won't have to clean it by hand.

Professional Lawn Striping

Create clean light–dark patterns via precise striping control, elevating visual appeal.

APPLICATION SCENARIOS

Sports Fields

Artificial Turf

Golf Course

GC01	
Weight	100 kg (220 lb)
Dimensions	1260×960×740 mm / 49.6×37.8×29.1 in.
Grass collection height	20–50 mm / 0.8–2.0 in.
Collection width	800 mm / 31.5 in.
Max travel speed	3 km/h / 1.9 mph
Max collection volume	150L / 33 gal
Max climbing ability	8°
IP rating	IPX4
Operating temperature	0–45°C

COMBO 3 – RM21 + BP01 BALL PICKER KIT

Equipped with the BP01, the RM21 enables fully automated ball collection: it gathers balls across the range, detects a full basket, and returns to the drop-off spot.

Drop-off Spot

Full-Basket Detection & Auto-Return

Detect full-basket status and automatically return to the drop-off spot. This makes the entire operation continuous and hands-free.

Cloud Scheduling for Full-Course Coverage

Monitor each robot's location, battery, and ball capacity live from the cloud. This allows multiple robots to work together smoothly to cover the entire course.

Lower Costs, Higher Efficiency

Enable fully autonomous ball collection to reduce labor needs and boost operational efficiency.

APPLICATION SCENARIOS

Golf Driving Ranges

BP01	
Weight	70 kg (154 lb)
Dimensions	1480×1120×590 mm / 58.3×44.1×23.2 in.
Picking width	900 mm / 35.4 in.
Basket count	2
Capacity per basket	400 golf balls

COMBO 4 – RM21 + DB01 DEW BRUSH KIT

Combined with the DB01, the RM21 streamlines morning turf care: it lifts and folds the brush automatically, clears dew evenly, and keeps the turf clean and play-ready.

Smart Lifting & Folding

Lift up the brush and fold it automatically during departures, turns, and operations. This avoids hitting obstacles and ensures smooth operation.
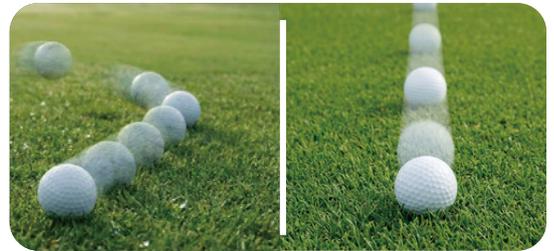

Customizable Brushing Direction

Customize the brush direction for even dew clearing, giving the turf a cleaner, more polished look.

Professional Greens, Ultimate Golf Feel

Maintain a smooth surface to ensure a fast, consistent ball roll, delivering the best possible golf experience.

APPLICATION SCENARIOS

Golf Course

DB01	
Weight	28 kg (61.7 lb)
Length	Single section: 1000 mm / 39.4 in.
	Three sections: 2930 mm / 115.4 in.
Brush lift	Supported
Brush folding	Supported