

# PRODUCT CATALOGUE





# **FJDYNAMICS**

Create for a better world

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# About FJDynamics

FJDynamics is on a mission to empower the most labor-intensive industries with accessible technological solutions. With R&D and operations centers in Singapore, U.S., Sweden, Hong Kong (China) and Chinese mainland, FJD is dedicated to simplifying workflows, enhancing productivity, and democratizing advanced technology for industries such as agriculture, digital construction and surveying across the world.



# PRODUCT CATEGORY

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# Precision Agriculture

By offering essential tools designed to streamline workflows and consistent precision, FJD helps reduce inputs and increase productivity, ultimately enhancing profitability and efficiency of your agricultural operations.



## Guidance and Steering System



FJD AT1  
Autosteering Kit



FJD AT2  
Auto Steer System



FJD AG1  
Guidance System



FJD AH1  
Hydraulic Autosteering Kit





## Accuracy

Manage all farming seasons through precise land leveling, seeding, spraying and harvesting with 2.5 cm accuracy.

## Efficiency

Get more farm tasks done in less time with automated operation.

## Productivity

Minimize overlaps and missed tillage to maximize yields.

## Safety

Empower hands-free operation for increased safety and decreased operator fatigue.

### Land Leveling System



FJD AL01  
3D Land Leveling System

### Positioning Infrastructure



FJD N20  
Fixed High Power  
GNSS Station



FJD V1  
Base Station

### Software



Farm Management  
System

# Electric Autosteering System

FJD provides 2 options for electric autosteering systems, AT1 and AT2, which use electric motors to automate steering. By reducing the need for manual control and providing precise guidance, these systems help reduce labor costs, lower fuel consumption, and increase accuracy and consistency in crop production.



## Navigate to Next-level Efficiency

With these systems, you can deal with various working scenarios assisted by autosteering and positioning technologies, helping you achieve higher yields at lower costs.

**FJD AT1**



**FJD AT2**





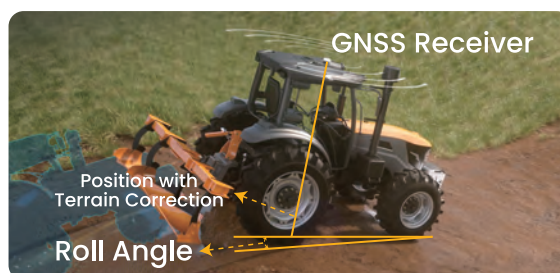
## U-turn

Designed to seamlessly guide your tractor through smooth auto turns at the end of rows, it optimizes maneuverability and ensures continuity in your day-to-day farming operations.



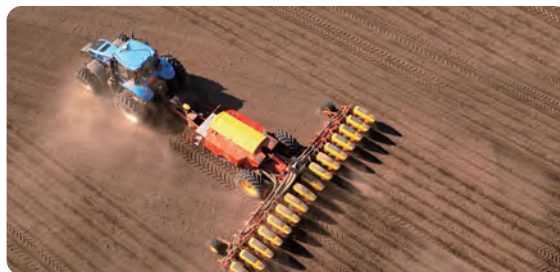
## Accuracy Compensation

Support a wide range of speeds — from 0.1 km/h to 26 km/h — to cater to various scenarios. It maintains an accuracy of 2.5 cm to meet multiple farm demands, including working on sloping terrain, executing low-speed tasks such as potato planting, and performing high-speed operations like crop protection and fertilizing.

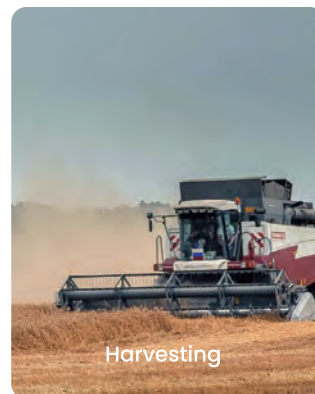
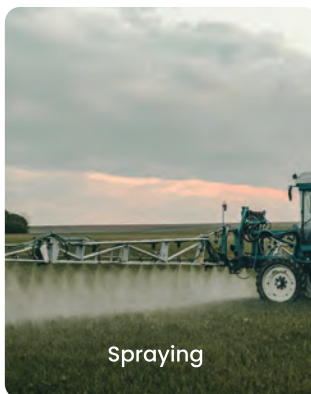
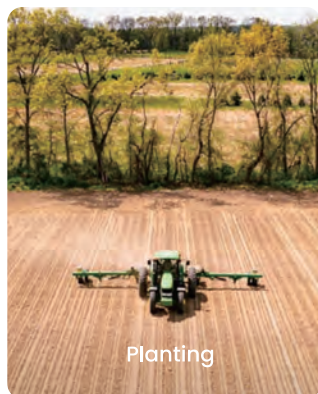
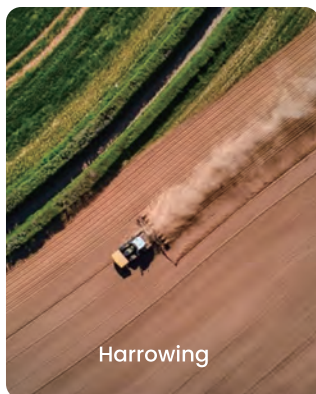


## ISOBUS

Seamless integration with ISOBUS-compatible implements, the VT and TC functions enable implement monitoring, controlling and variable rate control in real-time.



## Application Scenarios





# Hydraulic Autosteering System

FJD also offers hydraulic autosteering solutions for those who prefer to keep their original steering wheel. By delivering outstanding automatic steering performance, our system boosts comfort and reduces fatigue, catering to different needs and preferences.



## FJD AH1 Hydraulic Autosteering Kit

Integrating GNSS technology, the AH1 empowers agricultural machinery to effectively regulate steering oil, achieving 2.5 cm steering accuracy. Its robust force and quick responsiveness make it the perfect fit for large agricultural machinery that requires significant steering power, enhancing both accuracy and efficiency in field operations.



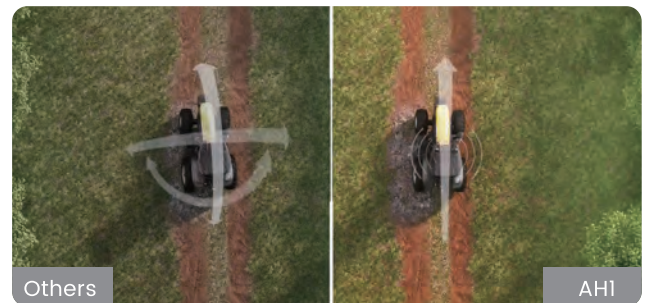
## Powerful Steering for Larger AG Machinery

By directly and quickly driving the steering wheels through hydraulic power, AH1 is better suited for larger tractors and heavy-duty agricultural machinery.



## Enhanced Steering Efficiency

By keeping the steering wheel and steering column stationary during operation, the AH1 effectively minimizes vibrations from rough terrain, ensuring precise and stable performance in uneven fields and high-speed modes.



## Wide Compatibility

The AH1 is highly compatible with a wide range of agricultural machinery, including different tractor brands and heavy-duty equipment, and even those tractors whose steering wheels are difficult to remove.



## Terrain Compensation

The AH1 maintains reliable accuracy even in challenging landscapes, including rolling terrains, slopes, and rough ground.



# Manual Driving Guidance System

In addition to the autosteering systems, we also have a manual driving guidance system, providing decent path-planning functions at an entry-level price.



## FJD AG1 Guidance System

### Manual Guidance with Ease and Precision

The FJD AG1 Guidance System integrates various positioning technologies (PPP, RTK, SBAS), offering precise location accuracy of up to 2.5cm for manual steering and assisting users in staying on the planned path. With its simplified configuration and an entry-level price, it significantly boosts efficiency while keeping costs in check, providing a streamlined experience.



## Effortless Installation

With only a guidance terminal and wirelessly connected GNSS receiver, you can effortlessly set it up and say goodbye to the hassle wiring connections for a simplified, intuitive experience.



## Multiple Accuracy Solutions

In addition to general GNSS services, the system can deliver 10-20 cm accuracy utilizing PPP (Galileo & BeiDou supported), and 20-50 cm accuracy by SBAS without the need for network or base station infrastructure. Additionally, exceptional positioning accuracy of 2.5 cm can be achieved through RTK with network or base station.



## ISOBUS

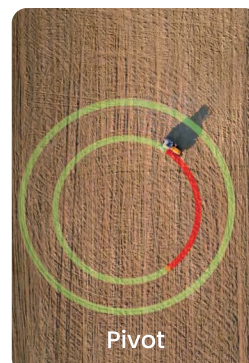
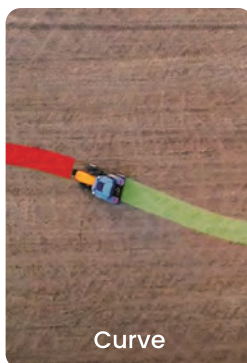
With a wireless ISOBUS module, the system offers VT/TC capabilities, facilitating real-time monitoring and control of equipment. This streamlines essential tasks like seeding, fertilizing, and spraying, significantly boosting work efficiency and minimizing waste.

\*Note: Additional ISOBUS module required.



## Versatile Guidance Lines

The AGI offers a variety of guidance line, including straight line, curve, A+ line, pivot, and line group, catering to diverse field shapes and operational requirements, assisting operators stay on the planned path.





# Land Leveling System

Land leveling plays a determinant role in the reduction of water use and the increase of land and water productivity in agriculture. FJD provides a high-precision and convenient solution for farmland planning.



## FJD AL01 3D Land Leveling System

### Leveled Farmland for Next-level Yield

The AL01 utilizes GNSS & RTK high-precision positioning technology to provide comprehensive solutions for farmland leveling and terrain planning. Our system ensures a smooth and uniform terrain through precise terrain survey and design, substantially enhancing water management and crop production in your field.

# Streamlined Project Design

## Terrain Survey

Collect elevation data through boundary mapping and internal points collection, greatly eliminating environmental interference for long-term operational efficiency and accuracy.



## Terrain Design

Quickly create terrain designs with customizable parameters, analyze earth movement, and optimize water flow with slope design for better water management.

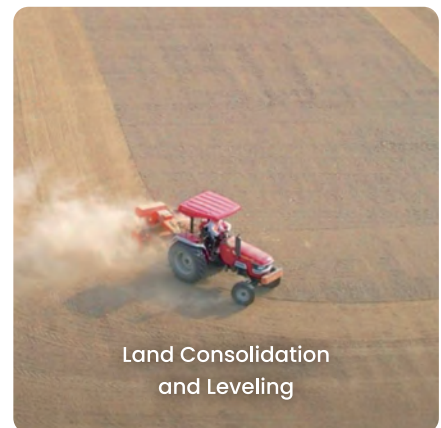
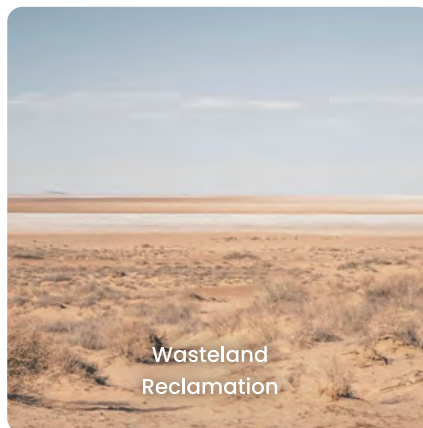
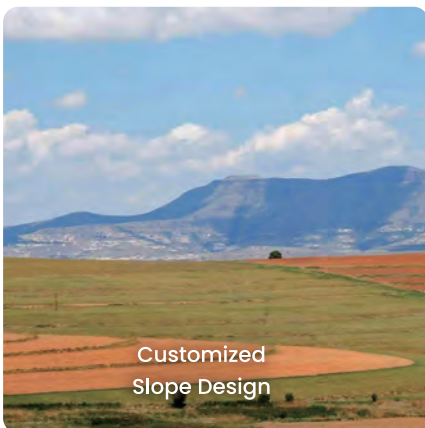


## Record Reserve

Save completed leveling tasks automatically as records to your task list, allowing you to access and reuse them at any time to avoid duplicate work.



# Application Scenarios





# Positioning Infrastructure

## FJD V1

### Base Station

### Make Navigation More Accurate

The V1 is a lightweight GNSS RTK receiver that supports all constellations and frequencies. With strong anti-interference capabilities, it provides fast and accurate positioning even in harsh environments.



#### Lightweight & Durable

Lightweight, portable, and rugged, this product boasts IP67 certification and 1.5-meter drop test durability. Constructed from Elektron materials, it's built to last and can handle harsh environments.



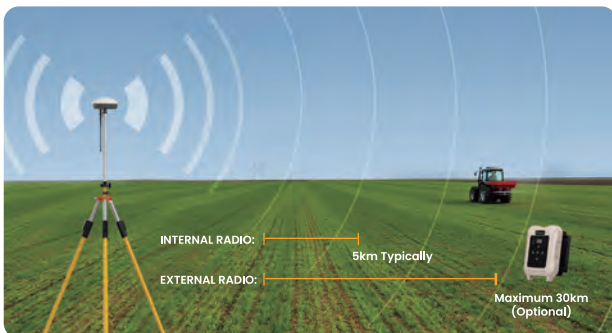
#### Long Battery Life

Powered by a low-consumption chip and a high-capacity lithium battery, the device can last up to 10 hours in base station mode.



#### Wide Work Range

The work range varies between 3-8 km based on the working environment's interference, but with an FJD external radio, the range can expand to 30 km in ideal conditions.



#### Effortless Connectivity with APP

This app streamlines the configuration process for both Android and iOS users, with a user-friendly interface and quick setup process.



# Positioning Infrastructure

## FJD N20

### Fixed High Power GNSS Station



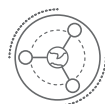
### Locate with Precision, Anywhere, Anytime

The FJD N20 is a multi-satellite, multi-frequency GNSS receiver that provides centimeter-level RTK positioning accuracy. Its Linux platform and high-power radio offer extensive compatibility and coverage up to 30km in ideal conditions.



#### Multi-satellite & Multi-frequency with CM-Level Accuracy

The RTK module supports multiple GNSS constellations, including BDS, GPS, GLONASS, Galileo, and QZSS, delivering reliable performance even in challenging environments.



#### Wide Signal Coverage

With its high-power radio, the N20 provides a coverage radius of up to 30km in ideal conditions, and easily switches between different power modes to meet various operation requirements.



#### Interference Detection

With the built-in frequency interference detection feature, the N20 can accurately identify interference frequency points, enabling it to avoid these interference frequencies and improve signal quality.



#### User-friendly Operation Experience

The N20's three independent modules integrate seamlessly and connect wirelessly for quick, easy configuration and parameter management.

## Application Scenarios

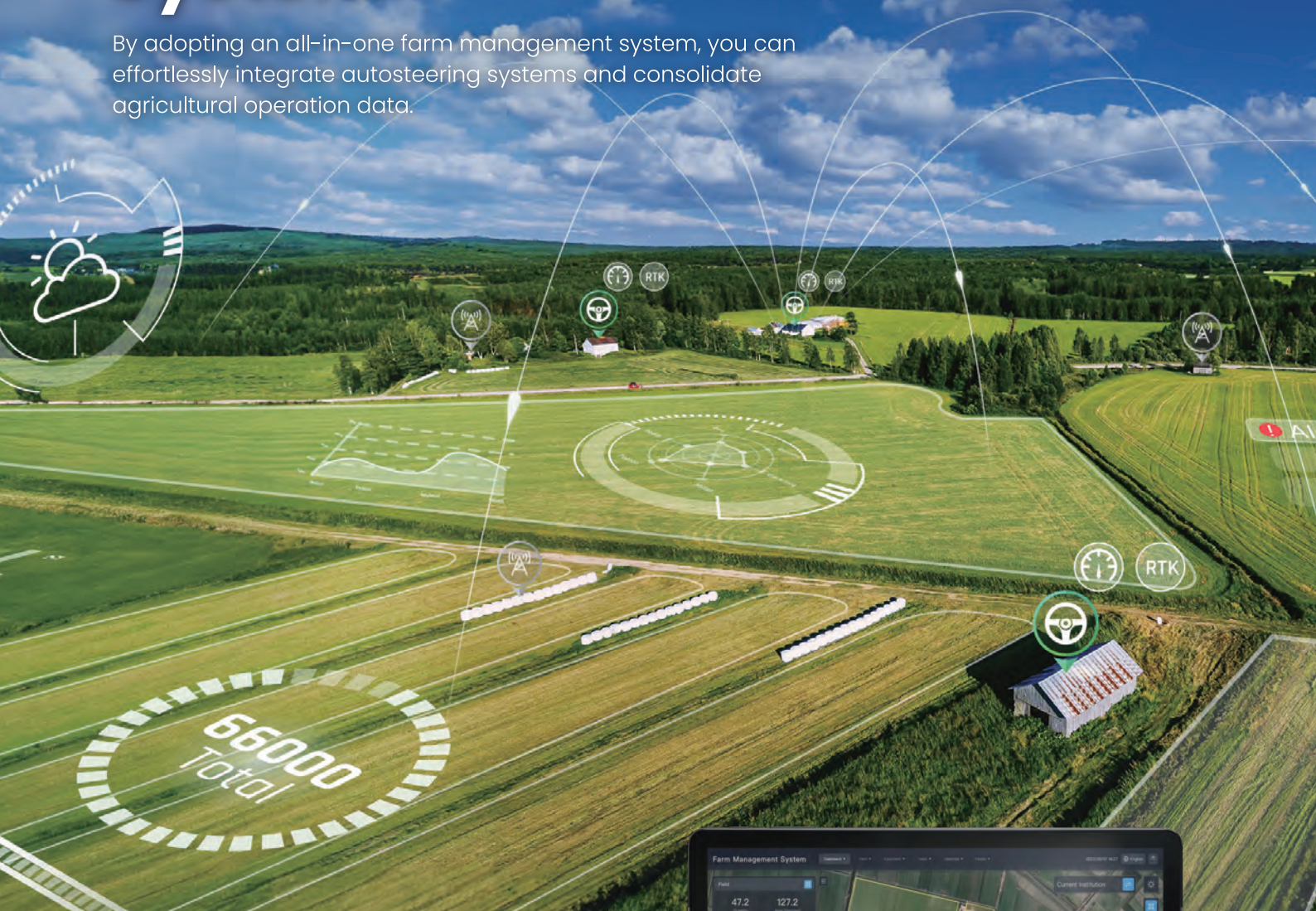
It supports multiple radio protocols and baud rates, providing a stable signal source for FJD products, keeping you covered throughout the farming seasons.





# Farm Management System

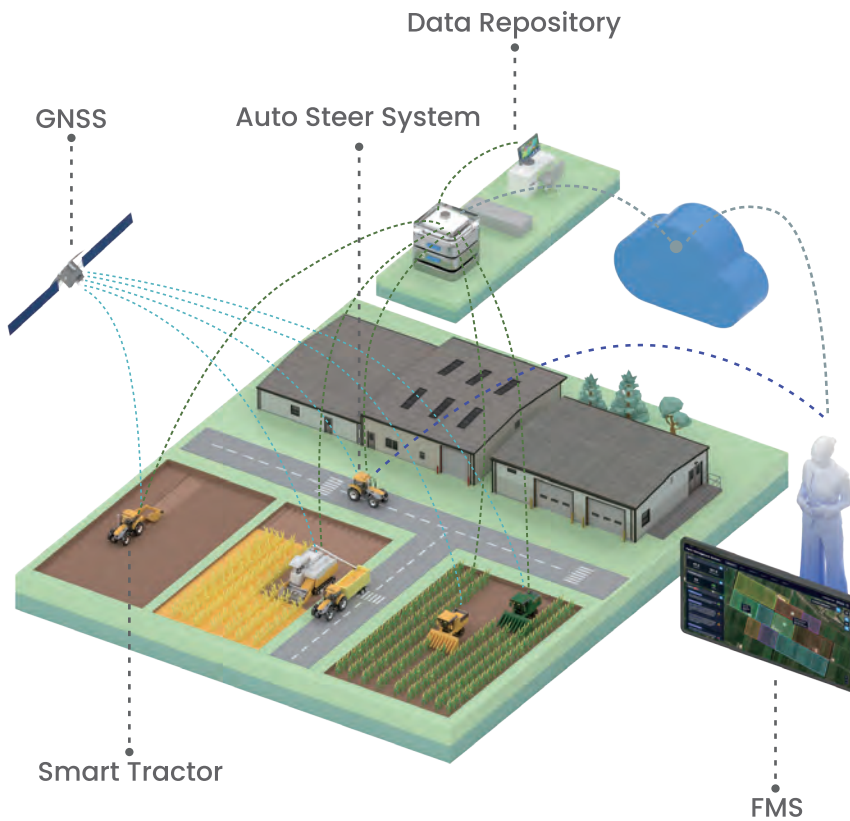
By adopting an all-in-one farm management system, you can effortlessly integrate autosteering systems and consolidate agricultural operation data.



## Your Guide in Precision Agriculture

The Farm Management System (FMS) seamlessly integrates auto steer systems and consolidates agricultural operation data, propelling farming into the digital era for enhanced efficiency and improved revenue generation.





## Interconnection

Synchronize your account between the FMS and auto steer systems, enabling seamless information sharing and task assignment.



## Visualized Data

Check the positions, status, and historical records of multiple auto steer systems anytime for insight-based decisions.



## Coordination

Create boundary and guidance lines ahead, assign tasks to auto steer systems for streamlined workflow.

## File Transfer

Support for importing/exporting boundary and guidance line files in GeoJSON/Shapefile formats, allowing easy transfer to the auto steer system.

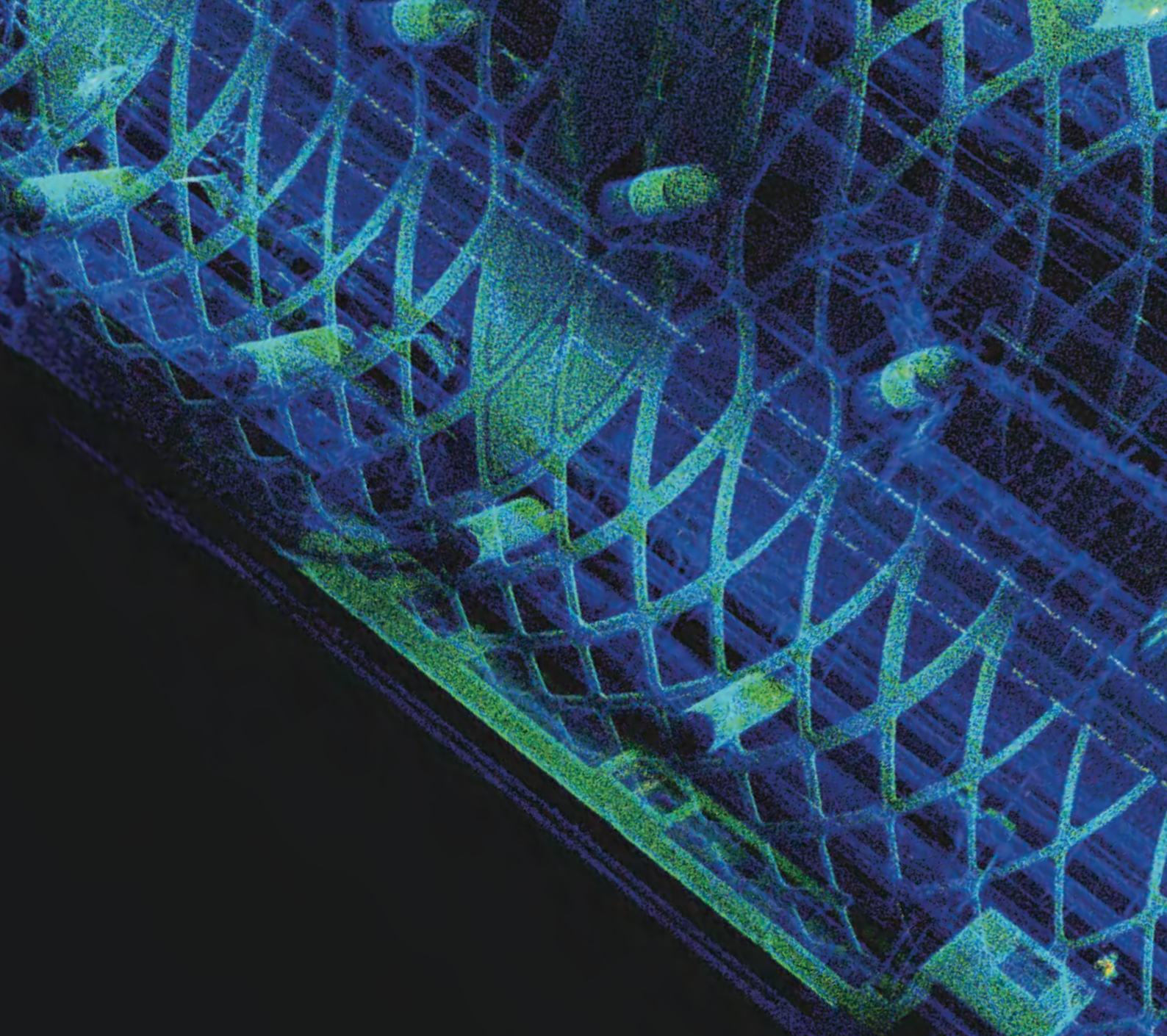


## Record Management

Based on the task records from the auto steer system, you could effortlessly keep track of farm work progress for improved task management and planning.



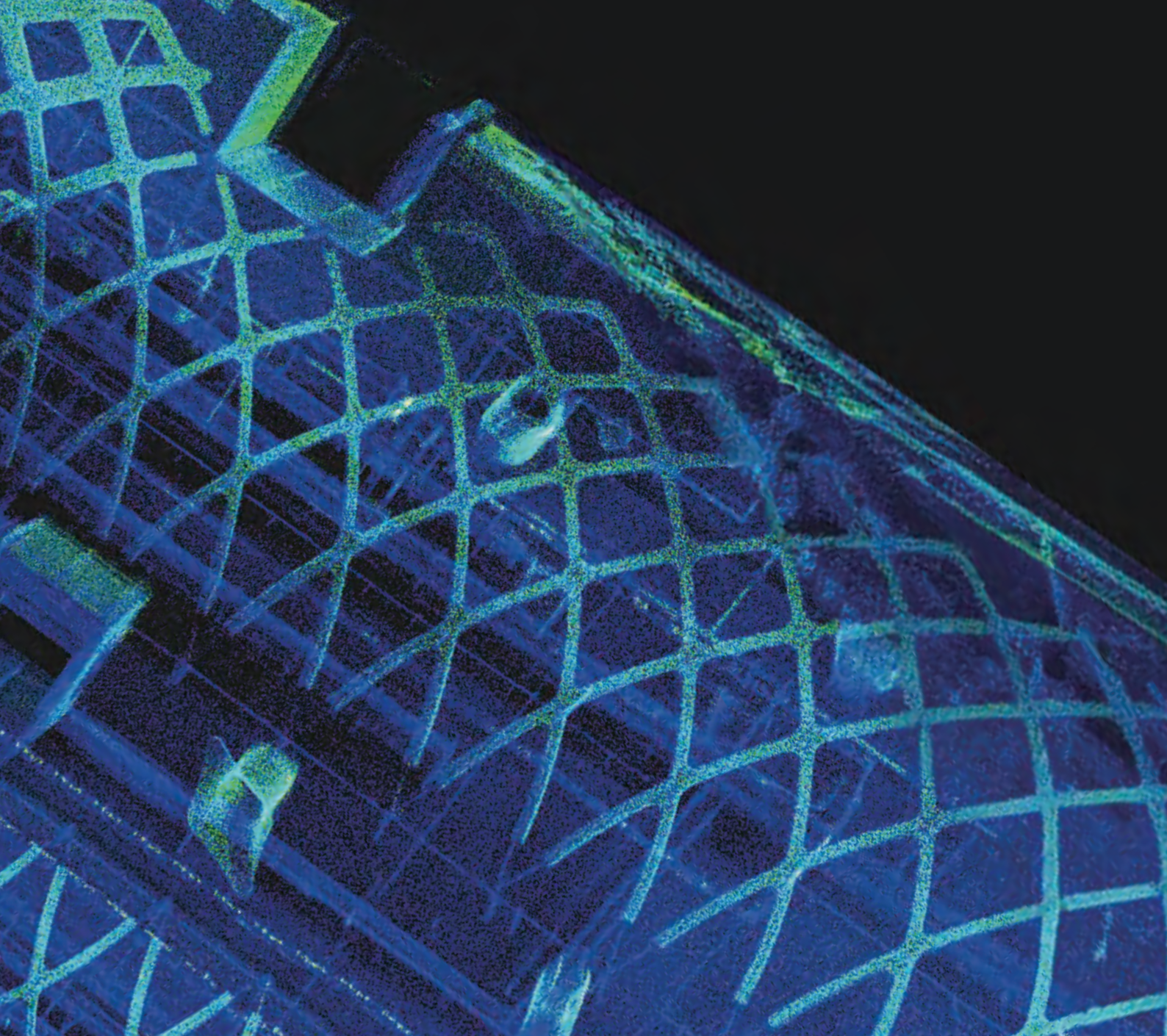




# Digitize the World with FJD Geospatial Solutions

Dedicated to making advanced technology more accessible, FJD offers efficient solutions designed to streamline workflows and boost productivity in the fields of laser scanning, aerial mapping and precise positioning.





## Accuracy

Capture high resolution data at centimeter-level accuracy.

## Flexibility

Indoor, outdoor, underground, or even up in the sky—wherever work takes you, FJD tools have your back.

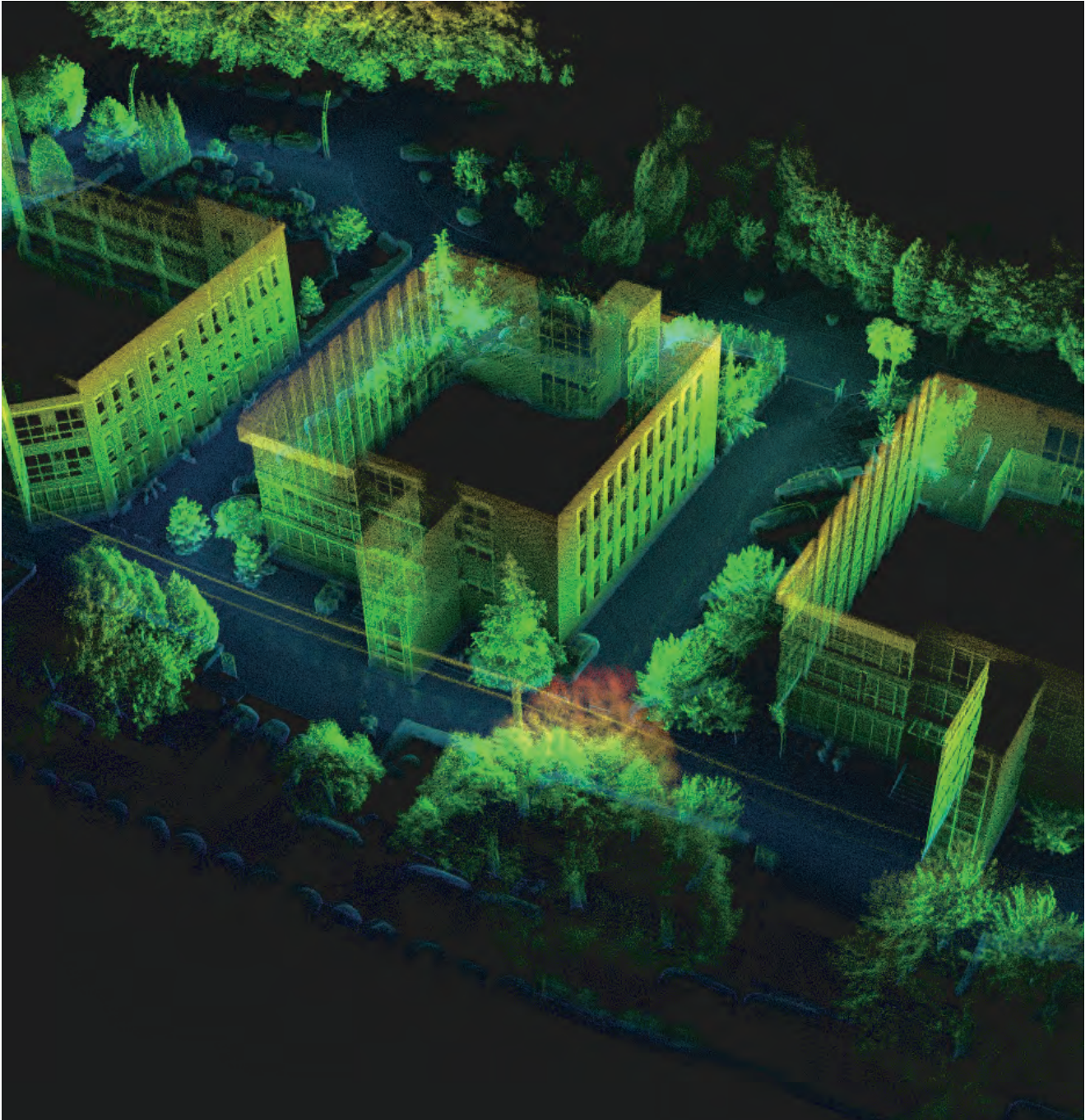
## Efficiency

Stop wasting time with repetitive field and post-processing tasks that can be streamlined with powerful tools.

## Safety and Reliability

Stay out of harm's way and capture mission-critical data safely, even in hard-to-access locations.





# FJD 3D Laser Scanning Solutions

Powered by a leading SLAM algorithm, FJD Trion LiDAR scanners build your reality as you scan. Capture indoor and outdoor, and even underground environments as you walk, and view real-time point clouds on your mobile device. See your surroundings come to life with every step, so you don't miss any detail.

## Data Capture

FJDTrion™ P1  
LiDAR Scanner



FJDTrion™ S1  
3D LiDAR Scanner



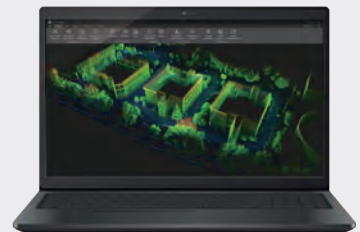
## Real-time Display and Post-processing



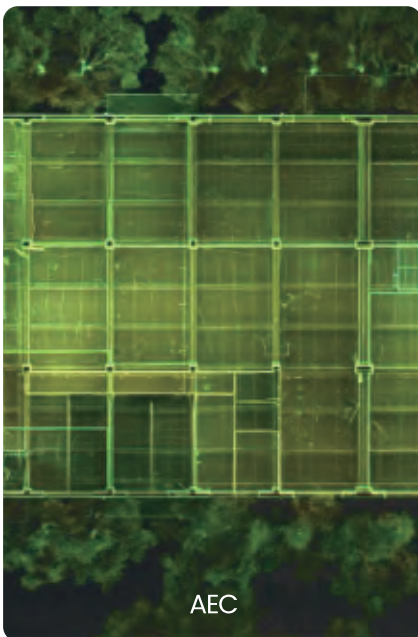
FJDTrion™ Scan



FJDTrion™ Model



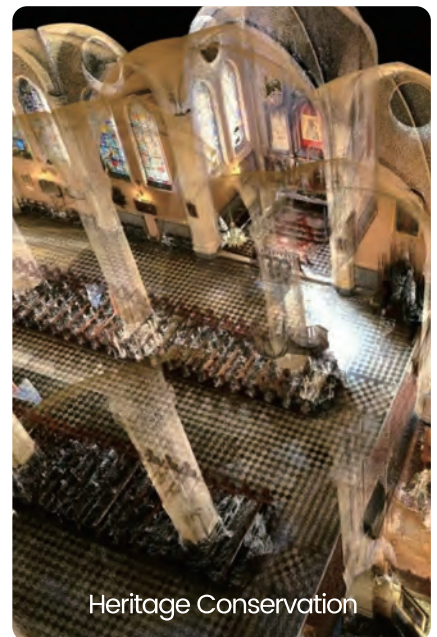
## Results Delivery



AEC



Infrastructure Management



Heritage Conservation



# FJD Trion™ P1 LiDAR Scanner



**Relative Accuracy**  
Up to 2 cm



**Scanning Range**  
40 m @ 10% reflectivity  
70 m @ 80% reflectivity



**Points per Second**  
200,000



**LiDAR FOV**  
360° × 59°



**Lightweight and Portable**  
1 kg / 2.2 lbs



**Real-time Point Cloud**  
Visualize as you scan

# Easy Reality Capture

Whether you are a seasoned pro or just 3D-curious, a walk around the site with the P1 lets you digitize your environment quickly and accurately.

## Indoor, outdoor, underground, all day long

Powerful SLAM technology enables the P1 to work in direct sunlight or even at night, in locations that may be inaccessible with traditional methods.



## Compact yet mighty

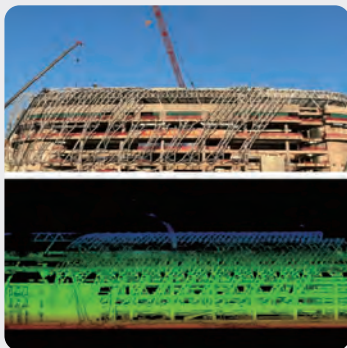
Weighing in at only 1 kg or slightly over 2 lbs, the P1 fits in a messenger bag and can work all day with easy battery swaps, recreating your environment in minutes.



## Use Cases

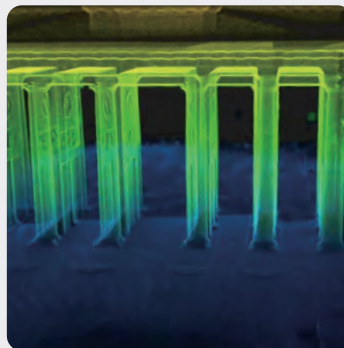
### BIM

A stadium project with a perimeter of 555 meters was scanned in 7 minutes.



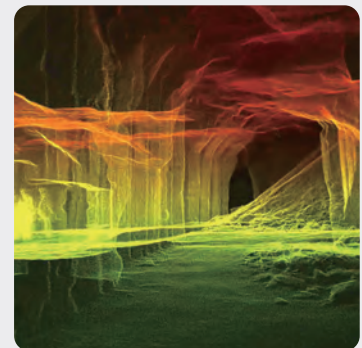
### Heritage Conservation

A vivid 3D model of the Brandenburg Gate in Berlin was generated in a 7-minute walk.



### Underground Mine

An underground mine tunnel of over 2000 m<sup>2</sup> was scanned in less than 10 minutes.





# FJD Trion™ S1

## 3D LiDAR Scanner

Standard

Pro



320,000/640,000  
Points per Second



2 cm  
Relative Accuracy



16/32  
Sensors



Real-Time Point  
Cloud



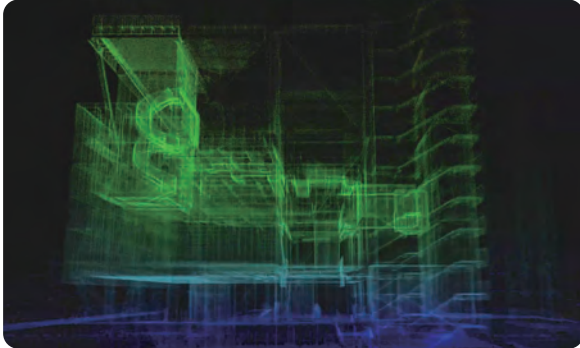
120 m  
Scanning Range  
@ 90% reflectivity



Dual Battery  
Hot-swappable

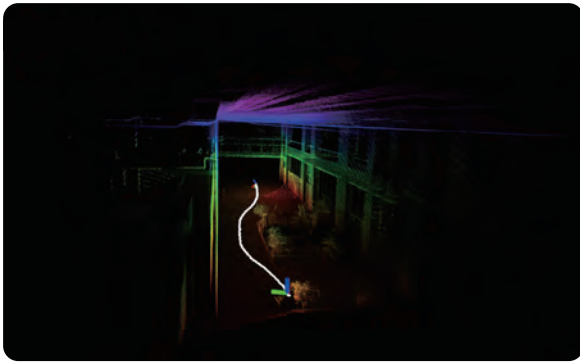
# A New Way to Scan the World

With an industry-leading SLAM algorithm, S1 and S1 Pro can quickly capture high-quality scans, while processing and displaying accurate point clouds on the mobile terminal in real-time.



## Long-Range Measurement

Capture precise measurements of complex objects and shapes in various dimensions with a built-in LiDAR 3D scanning unit, and generate 3D models in one scan.

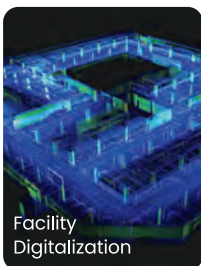


## Reliable Accuracy

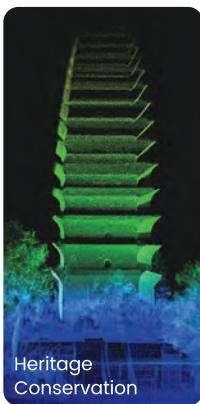
Scan a 100 m<sup>2</sup>/1,000 sq ft area in just 2 minutes, and get a reconstruction model with 2 cm of relative accuracy after post-processing.

\*Tested in experimental environment

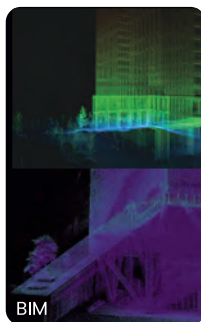
## Application Scenarios



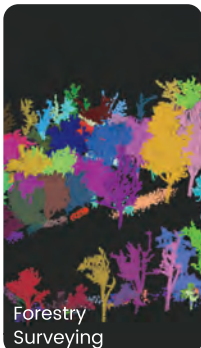
Facility Digitalization



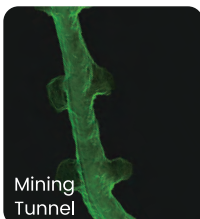
Heritage Conservation



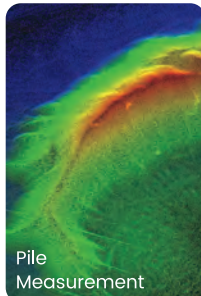
BIM



Forestry Surveying



Mining Tunnel



Pile Measurement

## Explore Different Configurations



Handheld



Camera



Backpack



Drone



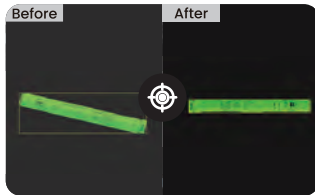
Vehicle



# FJD Trion™ MODEL

FJD Trion Model is a PC-based point cloud processing solution that enables denoising, colorization, and classification. Industry-specific modules empower quick and seamless results for like floor plan generation for construction, volume calculation for tunnels, and tree segmentation for forestry.

## Essential Processing Functions



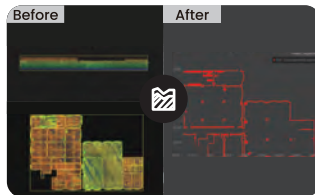
### Profile Analysis

Measure and display multiple cross-sections to evaluate point cloud data quality.



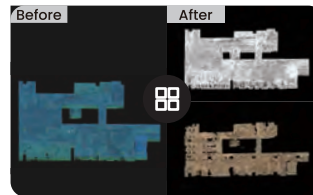
### One-Click Correction

Correct point cloud tilt with a single click.



### Volume Calculation

Calculate stockpile and enclosed volumes.



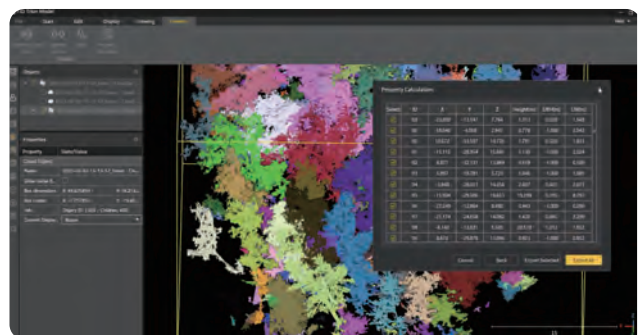
### Auto Classification

Automatically classify point cloud data related to buildings, trees, and geological features for urban planning, forestry, and mineral exploration.

## Applications

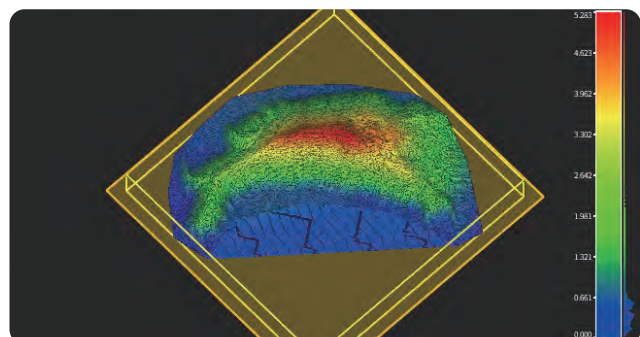
### Forestry

Save time and boost efficiency in forestry task with FJD Trion Model. By applying the forestry data extraction module, surveyors are able to classify forest point cloud data and separate ground points and automatically segment individual trees and extract essential data such as tree height, diameter at breast height, crown width, and tree species.



### Stockpile Volume Calculation

Achieve high accuracy and efficiency in volume calculation by importing data into FJD Trion Model. Utilize the point cloud segmentation function to isolate the relevant pile area and accurately measure its volume. Generate a comprehensive report for easy reference.



# FJD Trion™ SCAN

## Real-time Point Cloud Hub

Enhance your scanning experience with the FJD Trion Scan software. This real-time visualization tool can help you monitor the scanning process, thus ensuring a complete data capture in one scan.

### Workflow

1

#### Connect

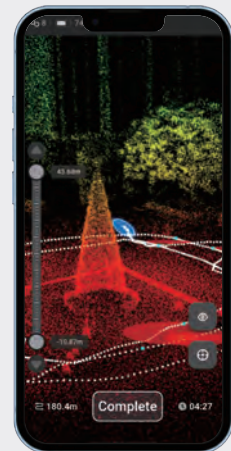
Open FJD Trion Scan app and connect to your device via WiFi.



2

#### Scan & view point clouds in real-time

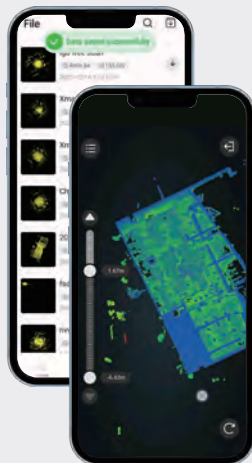
Check loop closure, battery and camera status in real-time as you scan.



3

#### Save & view results

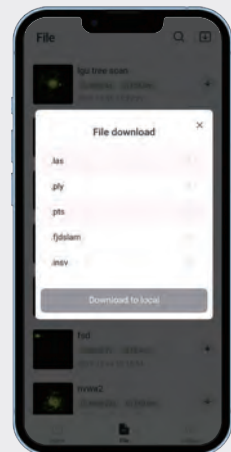
Preview the saved projects to ensure you have everything you need.



4

#### Download & manage data in bulk

Download your data to local in a few taps.





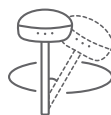
# FJD Trion™ V10i

## GNSS System With Visual Positioning



### Visual Measure & AR Stakeout

Dual cameras: 2 MP  
Forward, 5 MP  
Downward



### IMU-based Tilt Compensation

Support Visual  
Measure Tilt 60°  
Calibration-free



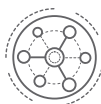
### RTK Accuracy

H: 8 mm + 1 ppm RMS  
V: 15 mm + 1 ppm RMS



### Rugged Reliability

IP68  
2 m Drop-proof



### Communication Diversity

SIM Card and UHF radio,  
NFC, Wi-Fi & Bluetooth



### Global Constella- tions Supported

1408 channels; GPS,  
GLONASS, Galileo,  
BeiDou, QZSS, SBAS,  
IRNSS

# Precision Redefined: Vision Beyond Coordinates

Grab the V10i and get measuring. Integrating an OLED screen, IMU, and two cameras, the V10i gives you real-time visual guidance on stakeouts and a next-level productivity boost in operations in hard-to-access locations.

## Clear Vision for Precise Stakeouts and Measurements

Seamlessly generate coordinates and measurements directly on the field controller with the V10i. Equipped with a 2 MP front camera and a 5 MP downward camera, the V10i brings a clear and simple illustration for surveyors on AR stakeout and visual positioning.

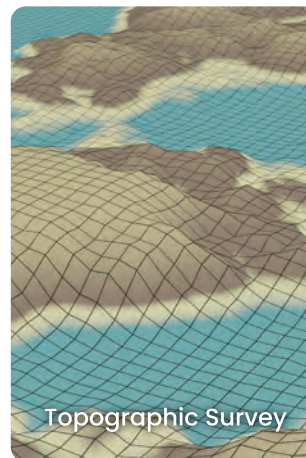


## Tilt Survey for Enhanced Efficiency

Measure coordinates at survey-grade accuracy with robust IMU-based tilt compensation that supports up to 60° tilt. No calibration required, and no more watching the level bubble.



## Application Scenarios





# FJD Trion™ V1t

## RTK Rover



Global Signal  
Coverage



Tilt Survey with  
Built-in IMU



Tilt Survey with  
Built-in IMU



15-Hour  
Battery Life



IP67  
Rating



Long Distance  
Radio

# A New Way to Measure the World

FJD Trion VIt, a versatile and lightweight GNSS RTK receiver, can fast deliver accurate positions in harsh environments with global signal coverage. VIt is engineered with an Inertial Measurement Unit (IMU) that frees you up from watching and leveling the bubble when measuring.



Hi-precision built-in IMU for accurate and reliable measurement. Precision: 2.5cm. Angle: 30°. (Max: 60°)



Fixed in seconds



965 channels: GPS, GLONASS, Galileo, BeiDou, QZSS, SBAS, IRNSS



Supports TRIMTALK, TRIMMARK III, TT450S, EOT and SATEL 4 FSK  
Distance Range: 5 km typically



IP67 Rating



Low-power chipset and large-capacity battery for long battery life: Base 10hrs and Rover 15hrs typically



## FJD Trion Field Controller E200

- 5-inch screen
- 7000 mAh, 24 h battery life
- CPU 2.4 GHz
- Memory 4 GB RAM + 64 GB Storage
- USB-Type C, OTG Support
- 1.5-meter drop test survivor





# FJD Trion™ N10 CORS System



Centimeter-level  
Positioning Accuracy (2.5 cm)



Multi-satellite  
Multi-frequency



All Weather  
7 \* 24 Hours



10000 Concurrent  
Users/Single Server



Timely Warning  
Function

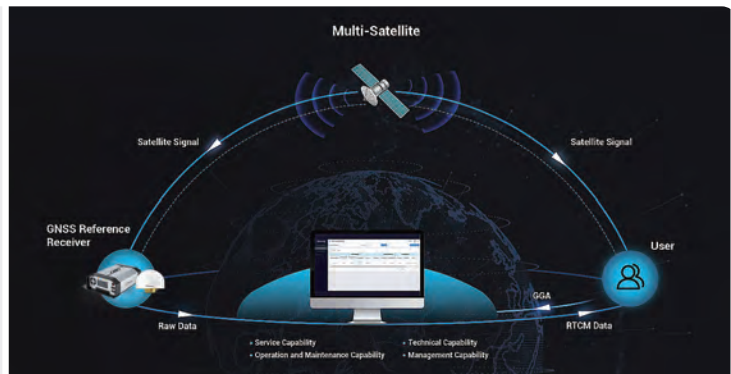


High Availability  
and Fast Convergence

# A New Way to Locate the World

With strong anti-interference ability and satellite constellations coverage, the FJD Trion N10 CORS System provides 24/7 correction data services and reliable high-precision location services for surveyors and navigation users.

## Complete Location-Based Service



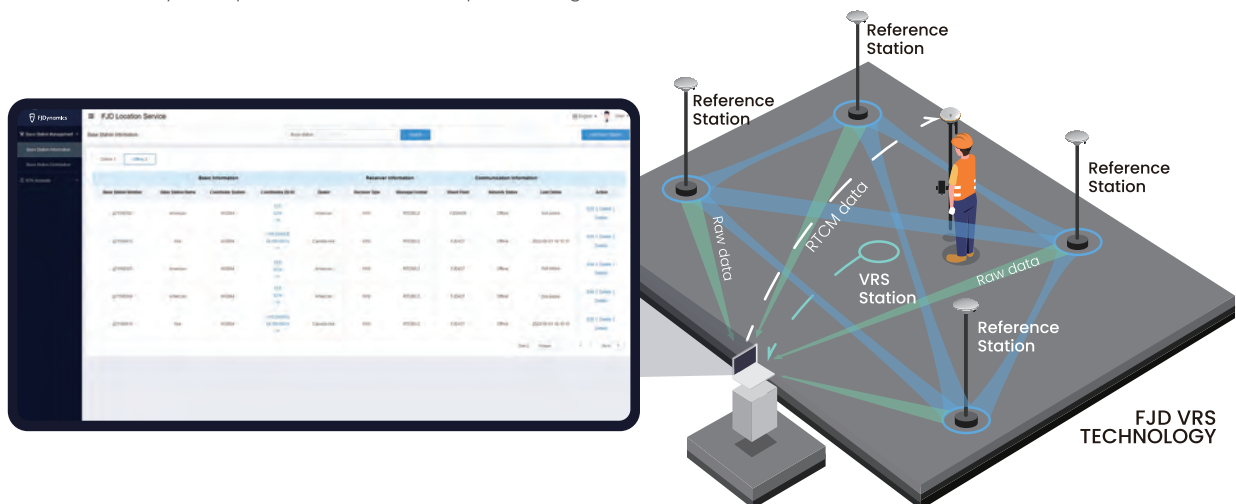
## Multi-Satellite & Multi-Frequency

The CORS system utilizes multi-satellite and multi-frequency data processing, resulting in strong anti-interference ability, accurate positioning, and stable performance.



## FJD Location-Based Service

FJD Location-Based Service (FLBS) is an efficient CORS management platform that provides reference stations and user management services. The platform manager can detect faults in a timely manner through the warning service, ensuring that the FJD CORS system provides more stable positioning services.



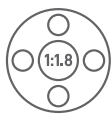


# FJD Trion™ O1

## Aerial Mapper



150 MP Resolution  
per Camera



1.8X Focal Length Ratio  
(Oblique-Nadir)



2 FPS  
Capture Rate



Up to 1/2500s  
Shutter Speed



650 km/h @5 cm GSD  
& 80% Forward Overlap



5\*2 TB SSD  
Mass Memory



Multi-platform  
Compatibility



Smart Cooling  
System

# 1.5 Billion Pixels in 1 Second

FJD Trion O1 is a large-format aerial solution that captures photogrammetric images of superior quality, resolution, and clarity. It has four oblique RGB cameras and one nadir camera, 150 MP each, making itself one of the most efficient all-in-one solutions for wide-area mapping and 3D city modeling.

## Ultra-high-resolution Image

- 90 mm oblique lens;
- 150 MP image every 0.5 seconds;
- 1.5 billion geospatial pixels in 1 second.

## Stable Performance in Flight

- Stable performance in flight as fast as 650 km/h @5 cm GSD and 80% overlap along the track;
- Reduces flight cost.

## Ultra-high Precision Collection

- 90 mm oblique lens;
- 150 MP image every 0.5 seconds;
- 1.5 billion geo-spatial pixels in 1 second.

## Smart and Stable Operation

- Smart cooling system;
- Stable operation across a wide temperature range.

## Multi-platform Compatibility

- Applicable in fixed-wing aircrafts and helicopters;
- One-man operation with the help of the specifically designed pod lifter.

## Outstanding Processing

- 5 industrial cameras;
- Internal and external parameters precisely calibrated and processed;
- Instant complete image production.



**FJD PLAN**  
EASY FLIGHT  
PLAN GENERATION



**FJD CAPTURE**  
FULL CONTROL  
OVER THE CAMERAS



**FJD PILOT**  
PRECISE FLIGHT  
EXECUTION

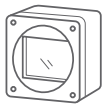


# FJD Trion™ AM150A

## Medium Format Aerial Camera



150MP Resolution



BSI CMOS Sensor



Wide Aerial Coverage



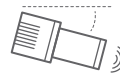
2 USB 3.0 Type-C  
Data Interfaces



Up to 4 fps  
Capture Rate



Up to 1/2500s  
Shutter Speed



Oblique Imagery & LiDAR  
Supported



Leaf Shutter



## Powerful CMOS and Interchangeable Lenses

### Sensor

54.4 × 40.0mm Sensor Size  
83dB Dynamic Range



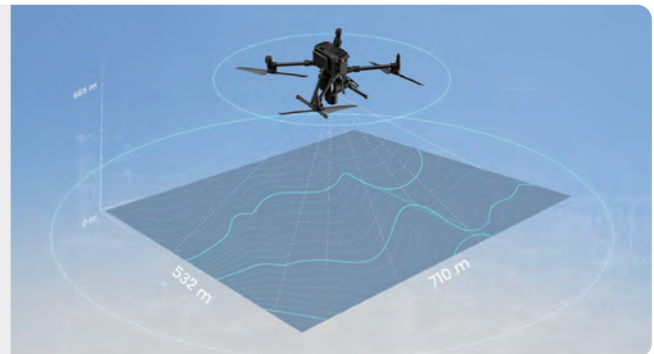
### Lenses

Up to 1/2500s Leaf Shutter  
50mm or 90mm Lenses



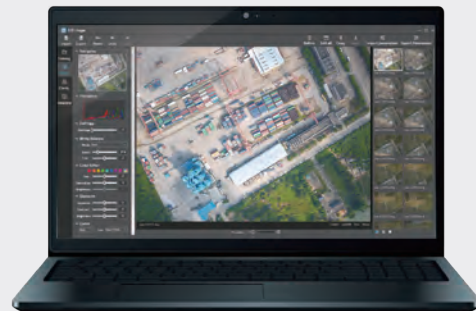
## Wide Coverage with Oblique Imagery

Cover more area with a shorter flight. The AMI50A covers 217km<sup>2</sup>/h, with a width of 710m at 5cm GSD and a flight height of 665m.

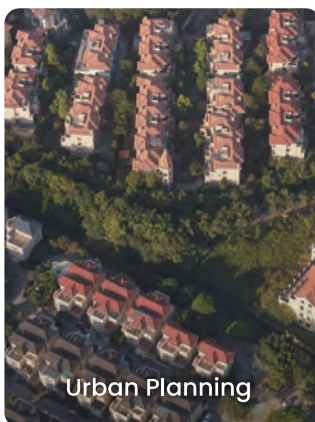


## Easy Post-processing with FJD Image

Edit photos, manage files, and get the results you need quickly with FJD Image. Color correct, edit in bulk, and compare before and after effects with one quick click.



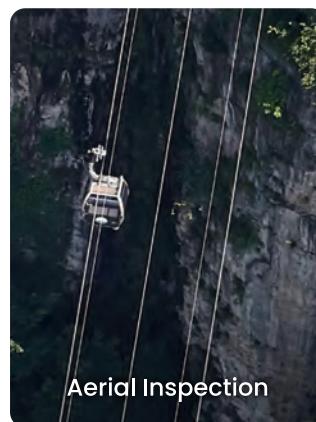
## Application Scenarios



Urban Planning



Infrastructure Mapping



Aerial Inspection



Forestry



# Digital Construction



## Guidance System

FJD G31 3D Excavator Guidance System



FJD Easydig Excavator Guidance System





## High Accuracy

GNSS positioning, RTK technology, and multi-sensor integration are utilized for precise and efficient machine control.

## Designed for All

3D visual guidance enables operators of all skill levels to check the current working process in real time.

## Less Time & More Savings

A seamless workflow promotes optimized productivity and reduces expenses on fuel and labor.

## Collaborative Workflow Control

Our platform helps site managers monitor machinery, materials, and workforce, accessible anytime, anywhere.

## Online Service & OTA

FJD offers a one-stop solution, including OTA updates, 24/7 online customer service, local support, and a 2-year warranty.

### Control System

FJD H36 3D Motor Grader Control System



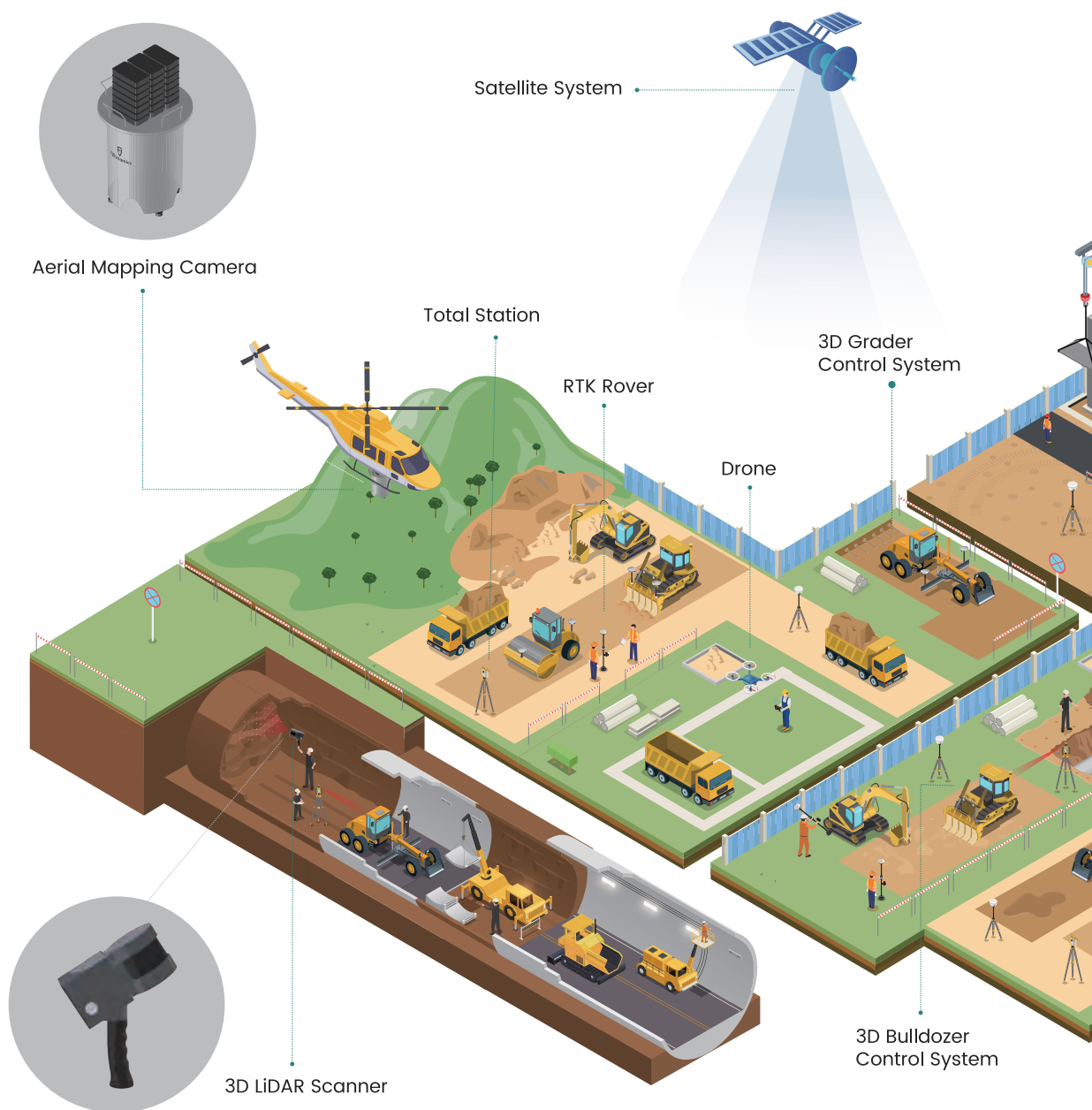
FJD H39 3D Dozer Control System

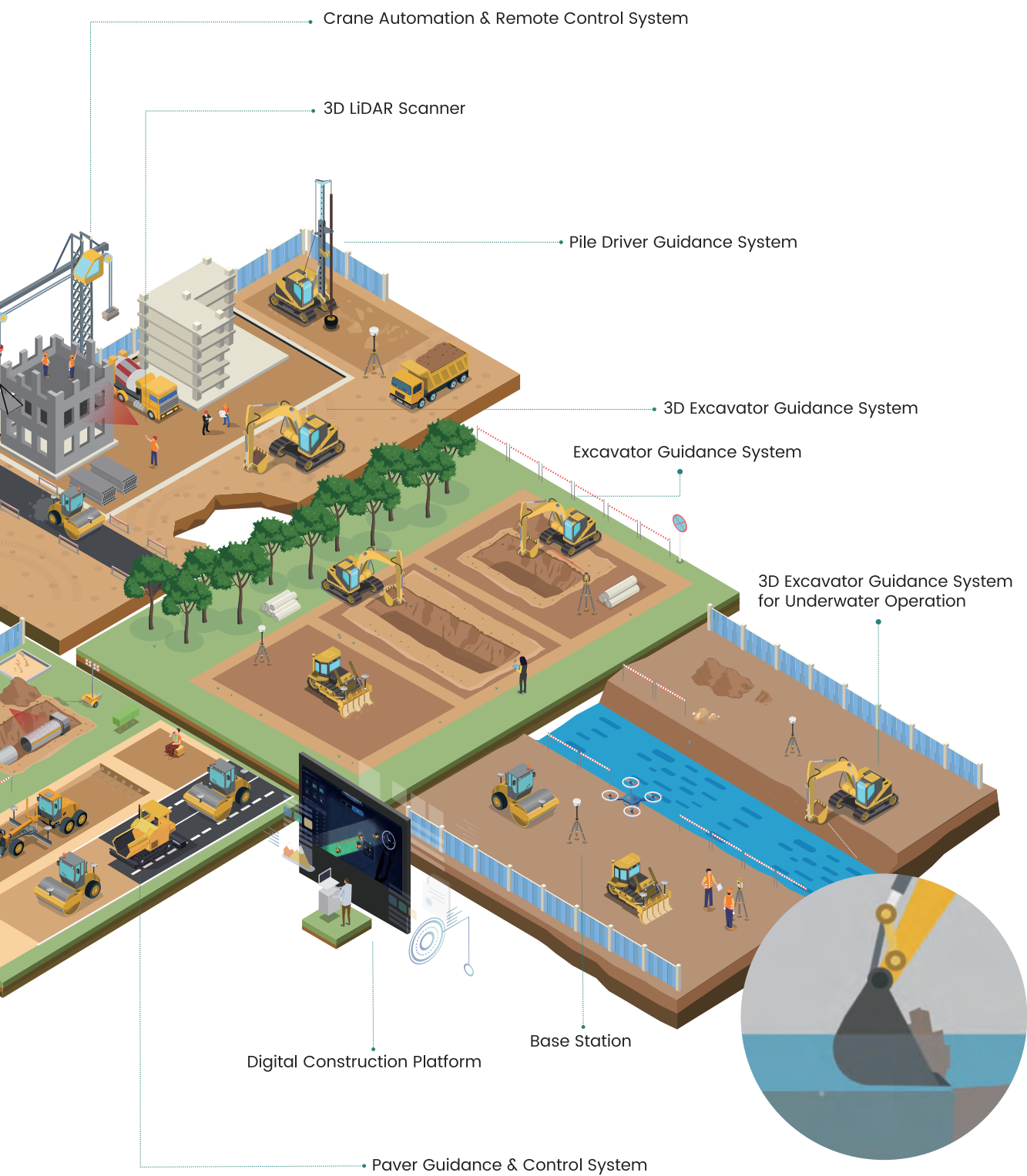




# FJD Digital Construction Solution

The FJDynamics machine control system covers a wide range of construction machinery, integrating geospatial technology to offer professional solutions for various scenarios. Whether you're working on engineering mountains, cities, highways, or ports, FJD solutions have you covered.





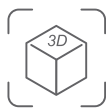


# FJD G31

## 3D Excavator Guidance System



Accuracy  
 $\pm 3\text{cm}$



3D Visual  
Guidance



Tilt Bucket  
& Tiltrotator Supported



Online Support  
& OTA



Network  
Transmission



Elevation  
Offset

# Higher Construction Efficiency With Reduced Cost

The GNSS and RTK-based grade control system features a 3D reference model, updates cut & fill workload, and displays excavator and bucket position in real time, so operators of all skill levels can deliver 3cm accuracy with ease.

## ±3cm Accuracy

Sensor module ensures high precision and reliability. GNSS antennas with ultra-strong and stable signal make 3cm accuracy possible.

## Site Design

With design drawings, you can set datum points on the spot. With the built-in transection templates, 3D visual files could be synthesized for a smooth start.

## Tilt Bucket & Tiltrotator Supported

The actual tilt position is shown on the screen in real time. The system can be upgraded to professional edition through adding a tilt bucket sensor.

## 3D Visual Guidance

The 10.1" touch screen displays a 3D reference model that is in synchronization with the actual excavator — you get the real-time position of the machine and the bucket and stay in the know of the cut/fill volume. And that means you don't need on-site guidance from surveyors.

## Working Scenarios



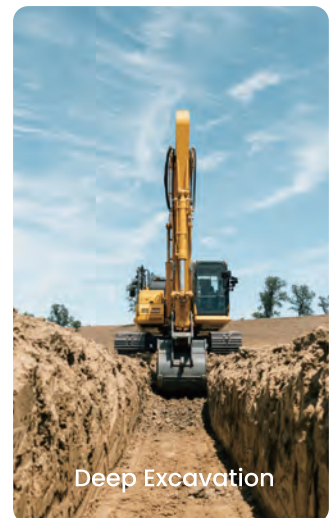
Slope Cutting



Land Leveling



Wading Operation



Deep Excavation



# FJD EASYDIG

## Excavator Guidance System

In addition to the autosteering systems, we also have a manual driving guidance system, providing decent path-planning functions at an entry-level price.



Wireless  
Module



100H  
Battery Life



Solar  
Charging



One-man  
Installation



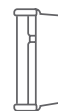
Beginner  
Friendly



Centimeter  
Accuracy



Tilt Bucket  
Supported



Laser Receiver  
Supported

# Easy Work With Easydig

Easydig is a wireless excavator guidance system that leads the industry with 1cm accuracy. It's so easy to use that even newbies can get started quickly. It comes with a modular design that allows you to switch between machines. And it has an affordable price for all operators.

## Interface Customization

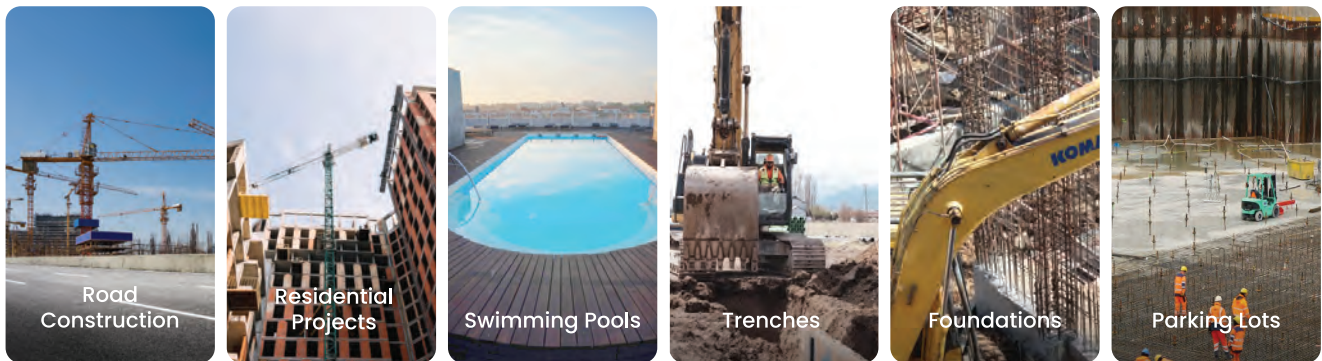
The system provides 4 view patterns and 8 perspectives. Choose 3 to 4 perspectives you'd like to see and keep an eye on them at a glance.

## Slope Cutting & Deep Excavation

With only a guidance terminal and all-in-one GNSS receiver connected via Bluetooth, you can effortlessly set it up and say goodbye to hassle wiring connections for a simplified, intuitive experience.



## Key Benefits



## Configurations



Basic FJD Easydig Edition



FJD Easydig Edition  
with Laser Receiver



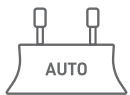
Professional FJD Easydig  
3D Edition

\*Under development

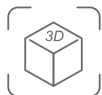


# FJD H36

## 3D Motor Grader Control System



Automatic  
Blade Control



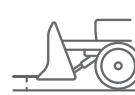
Real-time 3D  
Visual Guidance



Online  
Support & OTA



Centimeter  
Accuracy



High  
Flatness

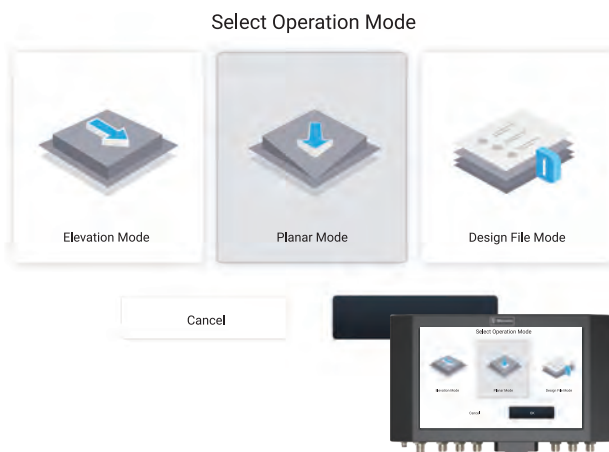


Task  
Visualization

# Automatic Control Smooth as Ever

Collect the spatial 3D coordinates of the blade in real time through GNSS technology and compare them with the design file. If deviation is found, the system will automatically adjust the mechanical shovel line through the valve control module.

## 3 Operation Modes



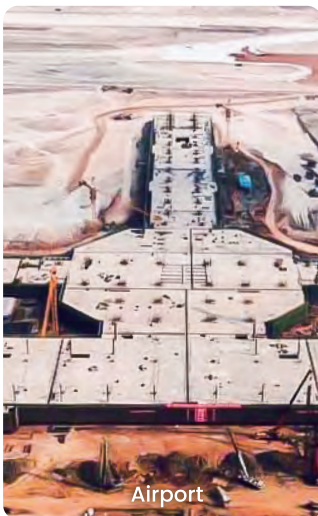
There are 3 modes for blade control to make your operation easier.

## 3D Visual Guidance



Innovative 3D visual guidance technology assists construction through real-time animation. No more repeated measurement and rework required.

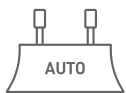
## Working Scenarios





# FJD H39

## 3D Dozer Control System



Automatic  
Blade Control



Real-time 3D  
Visual Guidance



Online  
Support & OTA



Centimeter  
Accuracy



Versatile  
Compatibility



Task  
Visualization



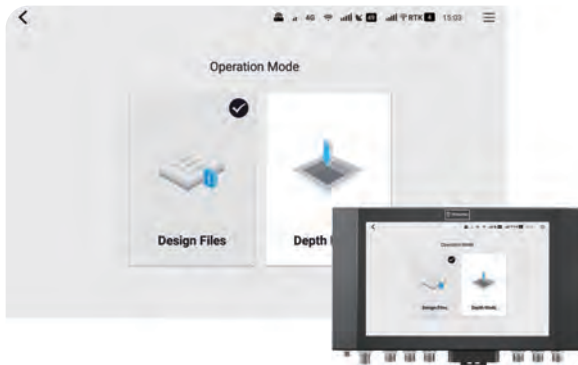
# Grade Smarter Work Faster

FJD H39 offers a comprehensive automatic control solution. Easily set project targets and precisely control blade grading based on 3D designs and real terrain. Seamlessly switch between manual and auto modes, and enjoy one-tap blade lift for enhanced efficiency and precision. FJD H39's automatic blade control caters to your construction needs with unmatched effectiveness.



## Operation Modes

There are Elevation Mode & Design Files Mode for blade control to make your operation easier.

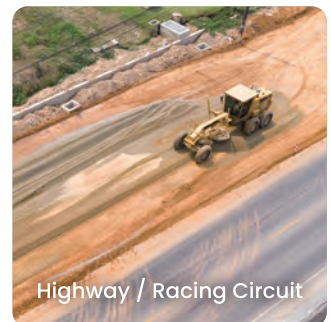
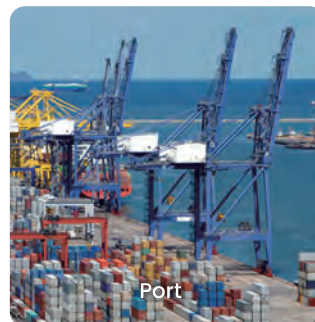


## 3D Visual Guidance

Innovative 3D visual guidance technology assists construction through real-time animation. No more repeated measurement and rework required.



## Working Scenarios





# Landscaping



## Robotic Mower

FJD Z42P Smart Lawn Mower



FJD RM21 Robotic Mower



FJD FR4000 Robotic Lawn Mower







## Garden Mower

FJD Z4210 Versatile Lawn Mower



## Walk-behind Mower

FJD GM22 Electric Walk-behind Greens Mower



## Mower Kit

FJD MS100 Mower Kit





# FJD Z42P

## Smart Lawn Mower



## Level up Your Mowing Experience

FJD Z42P, a groundbreaking autonomous electric lawn mower, offers 3 operating modes to bring you maximum flexibility. Based on the RTK positioning system, it can achieve centimeter-level positioning accuracy during path planning to boost your cutting efficiency. It saves costs while delivering superior mowing performance and versatility.



RTK Path Planning



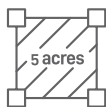
360° Obstacles  
Detection



Breakpoint  
Resumption



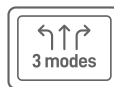
Path  
Customization



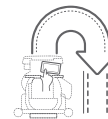
Up to 5 Acres per  
Full-Charge



100% Electric  
Control



Auto/Manual Mode  
& Remote Control



Assisted  
Driving Mode

# Flexible Operation Modes

## Autonomous Mode

The mower is equipped with our new fusion technology to perform unmanned operations even in areas with no satellite signal, such as under trees or near tall buildings.



## Remote Control Mode

Monitor the mowing status on the tablet and keep yourself away from heat, noise, and dust.



## Manual Mode

Straight Driving & One-click Turnaround. The assisted driving system helps you to perfect your work without holding the levers and truly turn the working time your time. Working is no longer a burden, but a relaxing and enjoyable driving experience.



# Autonomous Mowing Experience

Thanks to the FJD RTK positioning system, our mower sets up a virtual boundary and creates a map with centimeter-level accuracy. It provides selective paths to avoid overlaps and minimize skips, which significantly improves cutting efficiency.

## RTK Path Planning

Generates a zigzag or spiral path with centimeter-level precision.



## Path Customization

Flexible mowing paths can be set to cope with complex terrains through path memory function.



## Real-time Object Detection

360-degree object detection system ensures the safety of automatic operations.





# Ball Picker Combo

The FJD ball picker combo needs to be used in conjunction with the Z42P smart lawn mower. It features smart path planning, ball-picking zone customization, and 360° object detection with advanced automation algorithm. It is the perfect picker for any range with great labor cost savings and efficient sports field management.

- ✓ Smart Path Planning
- ✓ Customizable Ball-Picking Zone
- ✓ Precise & Efficient Ball Picking
- ✓ 360° Object Detection
- ✓ 3 Flexible Operation Modes
- ✓ User-Friendly & Compact Installation



## Smart Path Planning

Smart path planning technology, avoid unnecessary ball picking which is beneficial for grass perfection maintenance.

## Customizable Ball-Picking Zone

Customize ball picking zones can minimize the disturbance to golfers & smoothen the course management.

## Precise & Efficient Ball Picking

Cover a ball-picking area ranging up to 10,000 square feet per hour with 40 drums equipped, eliminating the ball-picking lapse with precise ball retrieval.

## 360° Object Detection

Detect objects in a 360-degree manner to avoid them rapidly, ensuring the safety of both the machine and the golfers.

## 3 Flexible Operation Modes

Offer auto/manual/remote modes for your selection, allowing flexible switch among three modes as needed to lower the labor cost.

## User-Friendly & Compact Installation

Stay away from the bulky structure design, easy for setting up(5 mins only). Leave your hands free with automatic navigation and operation.

# FJD RM21

## Robotic Mower



## Mowing Redefined for Precision and Sustainability

The FJD RM21 Robotic 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.

### Autonomy & Accuracy

- Smart route Planning
- CM-level accuracy
- Auto recharging
- Multi-field management

### Performance

- Large battery capacity
- Climbing ability up to 20°
- Mobile APP control

### Safety

- LiDAR sensor
- Collision bumper
- Rain monitoring



# Tech-driven lawn care reimaged

## Accurate and efficient mowing

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



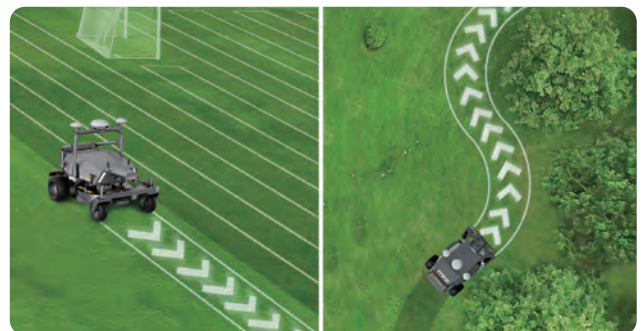
## One-click multi-field management

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.



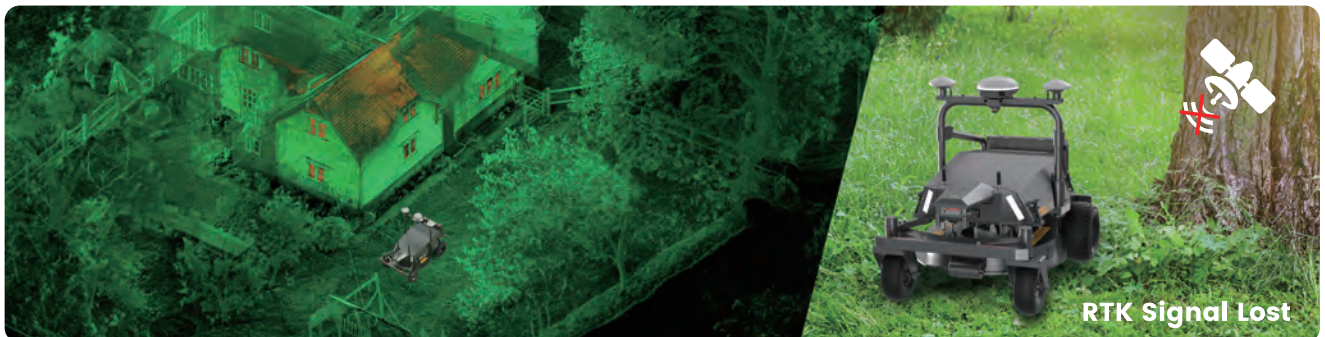
## Smart path planning

Our mowers use built-in obstacle avoidance to automatically plan mowing paths. 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

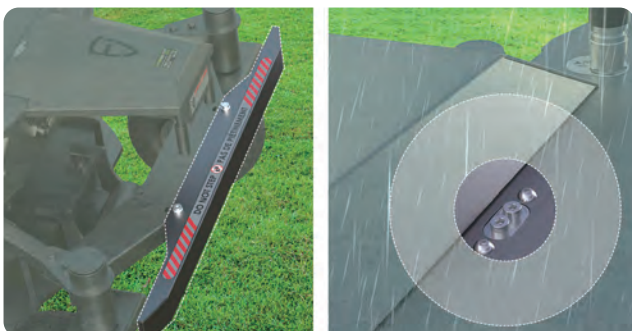
## 360° Real-time Object Detection

Use LiDAR to detect surrounding object without blind spots, with three distance modes available for safety considerations.



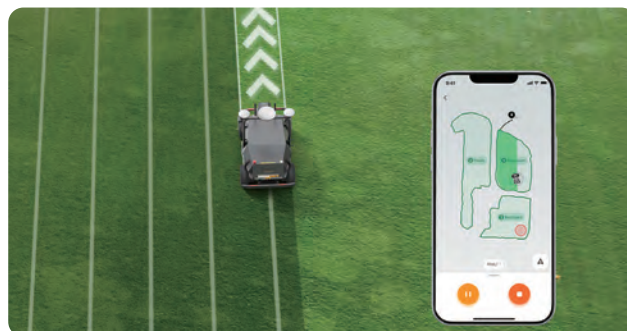
## Comprehensive Protection

Self-protect with collision bumpers and rain monitoring, and cover every angle for a safe and flawless operation.



## Make Mowing Easier and Smarter

Manage the mowing operation with app control anytime, anywhere.



## Reliable Performance

### No more battery anxiety

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



### No more worry about slopes

Climb slopes of up to 20°, handling complex terrain with ease.





# FJD FR4000

## Robotic Lawn Mower



## Map beyond limits, mow as you wish

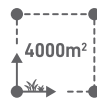
Powered by industrial RTK technology and a smart vision system, the FJD FR4000 robotic lawn mower defines wireless boundaries and ensures centimeter-level accuracy in positioning, eliminating the need for wires.



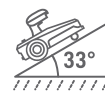
Industrial RTK  
At Least 1km Coverage



No Perimeter Wires



Mow Up to  
4000m<sup>2</sup> (1 acre)



Max Slope Up to  
33° (65%)



Smart Vision  
System



Route Planning and  
Auto-recharging



Multi-zone and  
No-go zone  
Management



App Control and  
OTA Updates

# RTK positioning modes tailored to your needs

## Radio RTK mode

Achieve centimeter-level positioning accuracy with a reliable signal coverage range of at least 1 km. In this mode, the RTK reference station can be connected via Wi-Fi without data costs. As a leading global brand, FJD's industrial RTK is widely used in precision agriculture, geospatial, digital construction, and professional landscaping.



## Network RTK mode

Remove the need for an RTK reference station, offering a versatile alternative to fulfill your flexible RTK connection needs. In this mode, you can effortlessly deploy your mower and set it in motion without additional setup.



# Smart vision system based on RGB camera and stereo camera

## Intelligent boundary recognition

Recognize the grassland and establish optimal boundaries for every section of your lawn to deliver a remarkable level of precision.



## Real-time object detection and avoidance

Feature a stereo camera, an RGB camera and a front bumper, guaranteeing superior object detection and avoidance.



## Enhanced vision navigation

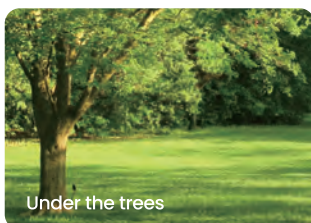
Navigate seamlessly with visual SLAM technology in challenging environments, ensuring uninterrupted operation even in areas with weak RTK signals.



# Precise positioning & navigation in challenging areas



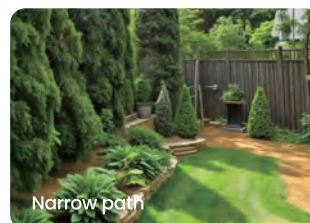
Hillside



Under the trees



Open grassy area



Narrow path



## Stand out in performance

### Max slope 33° (65%) to handle tricky terrains at ease

Conquer steep slopes with an impressive 33° climbing ability, handling inclines of up to 65% effortlessly.



### Better protection with a built-in rain sensor and IPX5 waterproof

Design with a rain sensor to pause mowing and guide the mower back during rainfall, and build with IPX5 waterproof to protect the mower from water damage.



### Security system for anti-theft

Come with a combination of PIN access, alarm features, charging station pairing, and GPS theft tracking to provide robust security.



### 190Wh capacity for long-lasting uses

Enjoy up to 180 minutes of mowing time per full charge, maximizing productivity for uninterrupted lawn care.



## Efficient and seamless lawn care

### Set mowing schedule

Define your lawn mow schedule, and the FJD mower will handle the rest around the clock.



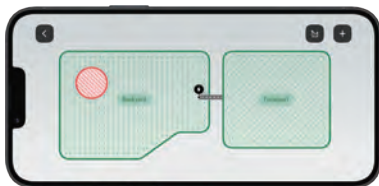
### Adjust cutting height

Set the perfect cutting height from 10 to 50 mm for different areas to suit your needs.



### Select mowing modes

Select different modes like parallel stripes for greater mowing efficiency.



### Manage Multi-zones and no-go zones

Customize mowing zones with tailored cutting heights and schedules while designating no-go zones to avoid specific areas.



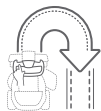


# FJD Z4210

## Versatile Lawn Mower



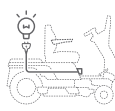
## Joy of Mowing, Enriching Garden Life



Assisted  
Driving



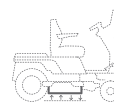
Zero Turn  
Steering



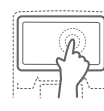
Mobile  
Power Station



Versatile  
Through Accessories



Electric Deck  
Adjustment

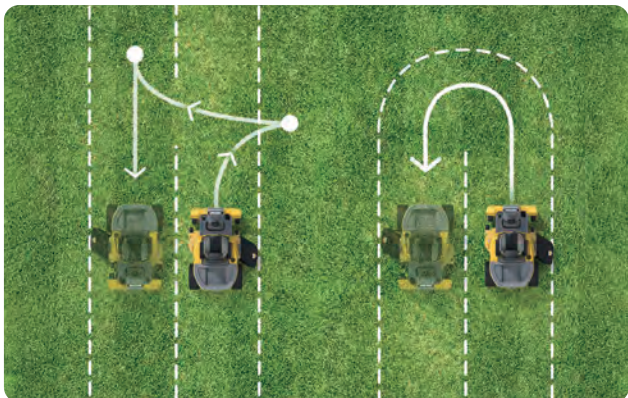


Touchscreen  
Control



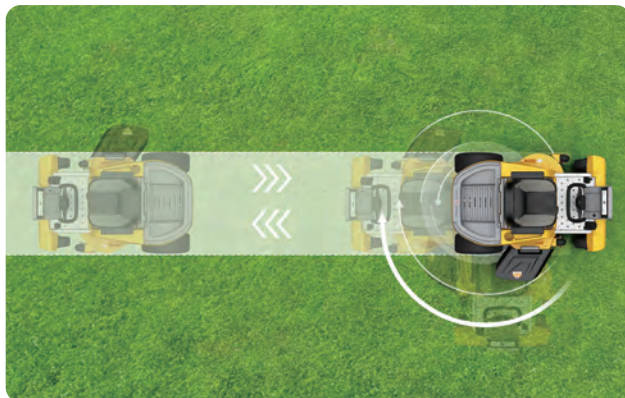
## Flexible Automatic Steering Options

Our mower offers two automatic turnaround ways to give you flexible steering options to keep your turf well.



## Zero-turn Steering

Experience the ease and precision of zero-turn steering with our mower's wheel control feature.



## Power Always Available

A mobile power station in your yard. With up to 2000W AC/DC output, our versatile electric mower can power devices like edge trimmer, drills, light and your smartphone. Simplify your yard maintenance with our electric mower's versatile power output.



## Higher in Power, Longer Endurance

Equipped with a 4kWh battery set and an extra battery as an add-on, our mower can provide sufficient power even for an entire household if needed. Long-time mowing has never been this easy.



## Multiple Charging Methods

Stay prepared no matter what. With multiple charging methods, you can charge your mower anytime, anywhere.



# FJD GM22

## Electric Walk-behind Greens Mower



## Revolutionize your mowing experience with pure electric power

Enjoy premium lawn care with the FJD Electric Walk-behind Greens Mower GM22. This eco-friendly mower runs on 100% electric power and can cover up to 7000 m<sup>2</sup> on a single full charge. With its four-direction floating head, one-screen operation, and one-click reel blade revising feature, you can mow your lawn like a pro with ease and efficiency.



## One-screen Operation

Easily adjust the travel speed and mowing frequency, as well as access the sharpening or mowing functions.



## Dual Driving Options

Effortlessly drive the mower by pressing physical buttons or holding the lever, and easily adjust the mowing speed with convenient buttons.



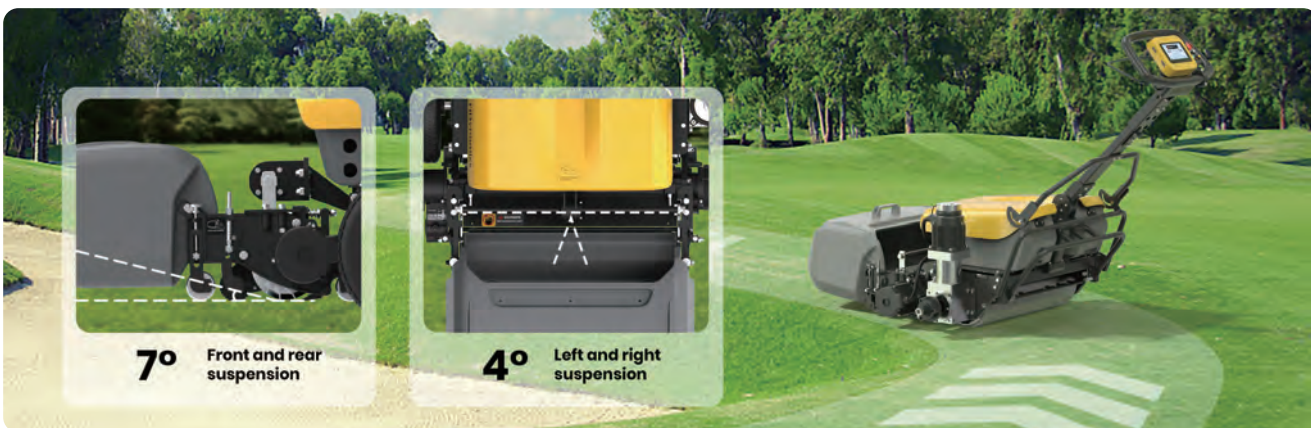
## Adjustable Handle Lever

Allow you to adjust the handle lever to your liking with three positions.



## Flexible Cutting Unit Suspension

Achieve a perfect cut on any terrain with GM22's four-direction floating head design. It adapts to slopes, bumps and curves, ensuring an even and smooth cut across your lawn.





## 100% Electric



## Full of Power



## Mowing Frequency Adjustment at Ease

Easily adjust your mowing frequency after replacing blade with FJD intelligent control system. No professional skills or tools required.



## Blade Sharpening Effortlessly

No need for additional tools or devices, saving you at least 30 minutes of your daily sharpening time. Reel blade revising also extends the life of your blade and reduces wear and tear.



## Easy Maintenance

No more mess with oil, air filter, spark plugs. Less time and money spent with GM 22 as it requires no engine maintenance or upkeep.





# FJD MS100 Mower Kit

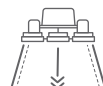
FJD MS100 is a high-precision positioning lawn mower driving assistance system that can be adapted to mainstream three-and five-link golf course mowers. The kit has straight, curved, and circular driving assistance. Make mowing easier and efficient.



Simple Installation



Precision Accuracy  
(±2.5cm)



Lane Keeping Mode



Curve Mode



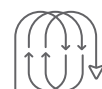
Pivot Mode



Slope Compensation



Support OTA



U-turn

# Effortless Mowing Mastery

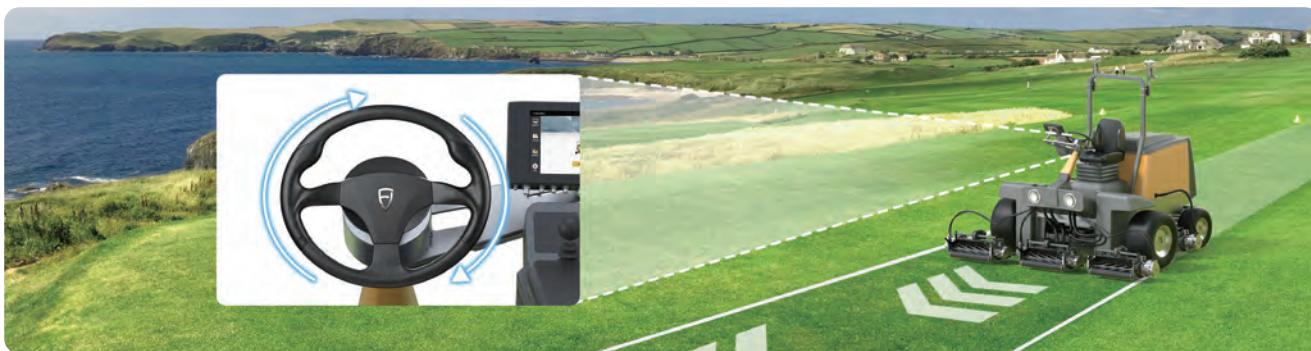
## Customizable Mowing Modes

Choose from straight lines, curves, pivots to achieve your desired mowing patterns. Our intelligent guidance seamlessly navigates any customized route.



## Reduced Complexity

Experience easy, stress-free mowing. With our guidance system, simply control the paddle while the kit handles the intricate steering control.



## Superior Mowing Accuracy

### Ultra-Precise Guidance

FJD high-precision positioning system provides centimeter-level accuracy for incredibly precise mowing, reducing overlaps and improving efficiency.



### Smart Terrain Adaptation

Our intelligent steering system automatically adapts to uneven terrain, ensuring a clean cut across different topographies and ground contours.

