PRECISE

PRECISE A2

Enjoy a PRECISE, RELIABLE, and EASY experience!

Autopilot Steering System with an Exceptional User Experience.

Super-high Fix Rate
99.9%

MATRIX
Enhanced by
the MATRIX ALGORITHM

Think PRECISE!

WWW.PRECISE-GEO.COM
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@PRECISE-GEO

99.9%

Super-high Fix Rate

Our product achieves exceptional positioning accuracy.

On average,
only 1 out of every 1,000 positioning attempts,
This precision ensures unparalleled reliability for critical applications.

*Fix rate and accuracy can be affected by external conditions such as multipath, obstacles, satellite geometry, and atmospheric conditions.

Enhenced By

MATRIX

Algorithmic Magic to Enhance
'Precision, Reliability, and Ease',
for an Exceptional User Experience.

Magical Module

AI Data Correction Algorithm Module

Utilizing an XGBoost model, this module employs AI tools to comprehensively train and fine-tune large-scale pre-data sets, generating data correction functions. This process effectively enhances real-time fix verification success rates by at least 18%.

Magical Module

Partial Ambiguity Resolution Algorithm Module

Implementing the lambda algorithm for fix solutions, this module performs up to ten intelligent satellite exclusion operations based on actual signal conditions, further improving fix rates.

PRECISE A2

Autopilot Steering System with an Exceptional User Experience.

Worry-free signal

Ensure stable, high-precision positioning with enhanced network availability.

Worry-free installation

Single antenna, no wheel angle, equipment Factory pre-installed

Worry-free slopes

Full compensation for tilt and pitch

Worry-free adaptation

Adaptable to a wide range of self-propelled agricultural machinery, including tractors, rice transplanters, and sprayers.

Worry-free speed

Operates seamlessly at speeds between 0.7 and 15 km/h

Worry-free after-sales

Remote assistance and efficient after-sales support; seamless remote upgrades bring new features anytime.

Worry-free path

Supports multiple operating modes including straight line, curve, circle, and return

Worry-free sharing

Historical AB lines can be reused and shared across multiple vehicles to maximize efficiency.

Built-in Display and Control Unit

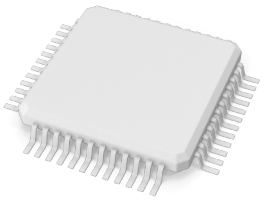
Processor	ARM Cortex-A7, 1.5 GHz, Quad-core, with 2GB RAM and 16GB internal storage
Protection Level	IP67-rated
Positioning & Communication	Supports radio communication, dual-network 4G data transmission, built-in high-precision positioning and directional BeiDou module
Input/Output	8 DO outputs / 4 AI inputs
Power Supply	9–36V DC, with reverse polarity protection and power failure detection support
Operating Temperature	-40°C to +70°C
Display	8.1", 1024×600 pixels, 750 cd/m² brightness

Satellite receiving device

Channels	1408 channels, NebulasIVTM based
Constellation	BDS/GPS/GLONASS/Galileo/QZSS BDS: B1I, B2I, B3I GPS: L1C/A, L2P (Y)/L2C, L5 GLONASS: L1, L2 Galileo: E1, E5a, E5b QZSS: L1, L2, L5

Steering Wheel with Electric Motor

Applicable Motor	12/24V DC
Rated Torque	10 N·m
Maximum Torque	16 N·m
Continuous Current	10A
Peak Current	15A
Operating Power Supply	DC +7V ~ 32V
Control Modes	Speed Mode, Position Mode
Encoder Resolution	1024 pulses per revolution



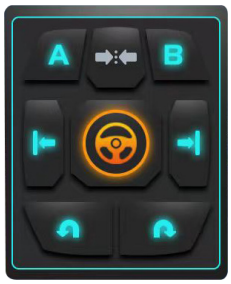
Navigation ECU (Electronic Control Unit)

Wide Voltage Power Supply	9-36V
High-Performance Processor	
Positioning	High-Precision Dual-Antenna Positioning Module
Positioning Accuracy	Less than 1 cm
Heading Accuracy	Less than 0.1°
High-Precision Gyroscope	Drift Accuracy <0.1°/h
Communication	4G Network, Built-in 433MHz Radio
Outputs	4-Channel DO (One Channel Up to 12A)
Inputs	4-Channel IA (0-24V Input)
Interfaces	4× RS232, 2× CAN

(Optional accessary)

Wheel Steering Angle Gyroscope

Power Supply: 9-36V
Six-axis IMU
Supports High Dynamic Performance
Intelligent Full-Temperature Compensation
Designed for Harsh Operating Conditions



(Optional accessary)

Technical Requirements

Operating temperature: -20°C ~ +80°C;
Protection level: IP67;
The keypad communicates via CAN;
Unspecified tolerance dimensions shall comply with IT13 grade.
Description of panel functions:
key1: Point A
key2: Align to the current line
key3: Point B
key4: Left offset
key5: Manual/Automatic navigation
key6: Right offset
key7: One - key left turn
key8: One - key right turn