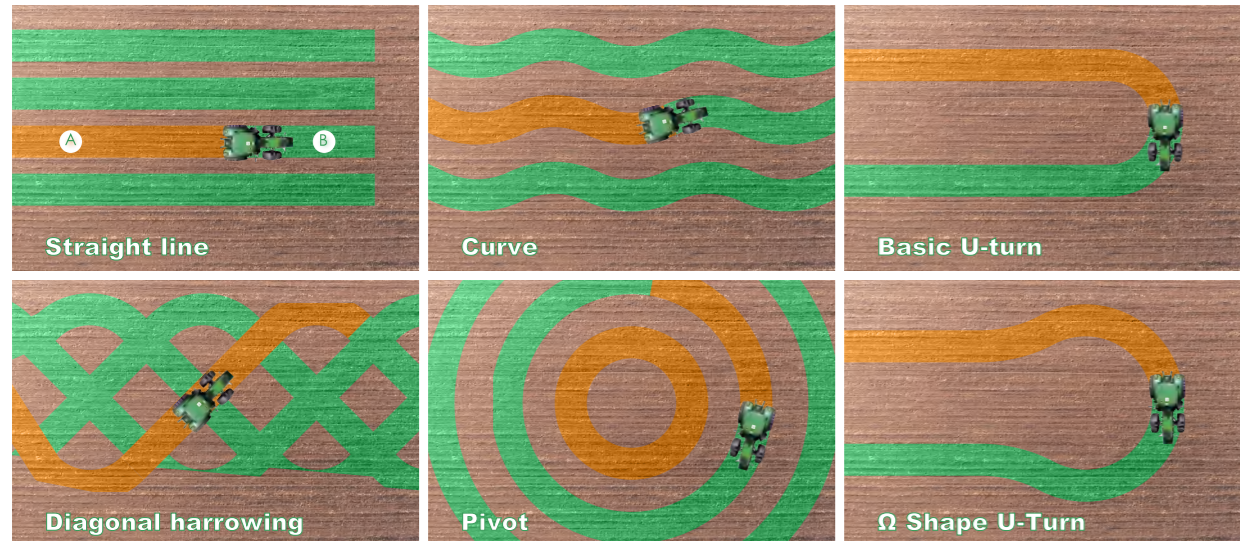


## Applications



## Work modes



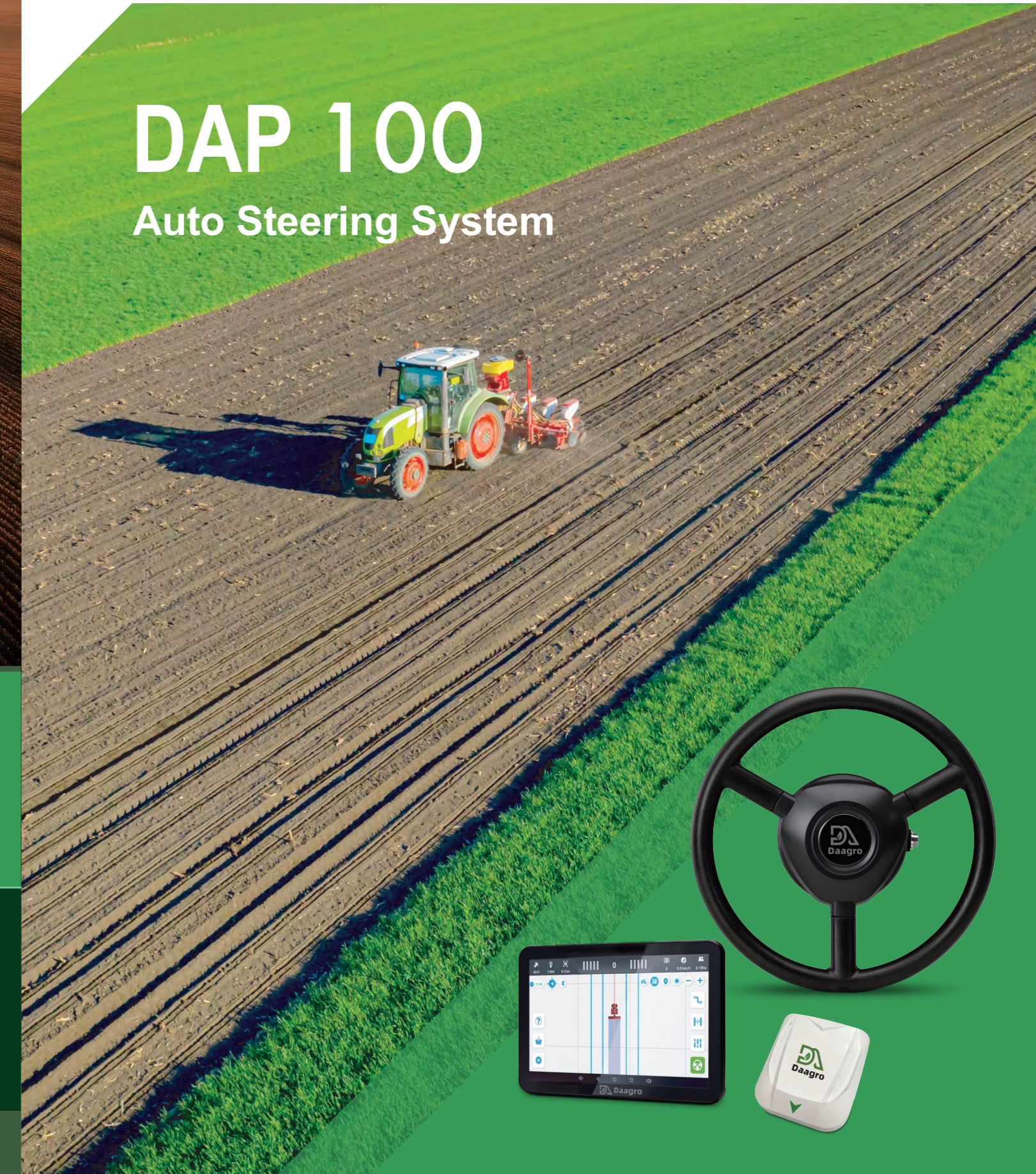
## Related agricultural solutions



STEERING AGRICULTURE INTO THE FUTURE

# DAP 100

## Auto Steering System



Daagro Technology specializes in smart agriculture. Led by veteran industry experts, we offer global smart farming solutions covering the entire planting-to-harvest cycle, enabling precise operations, visual data analysis and automated decision-making.

Our solutions help farms raise productivity, pursue sustainability and achieve refined field management. Aiming to pioneer the future of smart agriculture, we keep developing advanced technologies to innovate farming worldwide.

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## Components

### AP100 GNSS Receiver

- All-in-one design integrates GNSS antenna, GNSS module, gyroscope, and radio for easy installation
- Supports full-constellation and full-frequency tracking, even in challenging environments
- IP67-rated enclosure ensures robust dust and water resistance in harsh operating environments



### Tablet

- 12-inch high-resolution full-screen display for enhanced clarity
- Dual-system platform with powerful computing performance
- High-brightness, anti-glare screen for optimal visibility in strong light
- High protection rating with resistance to shock, high temperature, and salt spray
- Comprehensive interfaces for strong scalability
- Reliable communication modules with stable signal connections

### Electric Steering Wheel

- Slimmer, lighter design for enhanced comfort and control
- High-torque system with improved efficiency delivers more precise handling, ensuring great stability on uneven terrain
- Upgraded IP rating provides superior water and dust resistance for reliable operation in harsh environments
- Advanced real-time dynamic correction enables accurate steering alignment with minimal deviation



## Benefits



Enhanced efficiency



Higher productivity



Reduced labor costs



Better land utilization

## Features



### 2.5cm pass-to-pass accuracy

Delivers  $\pm 2.5$  cm auto-steering accuracy through full-constellation tracking and multi-source correction technology.



### 0.3-22km/h Operating speed

Maintains centimeter-level accuracy across its full operating speed range from 0.3 to 22 km/h.



### High compatibility

Compatible with most mainstream tractors, easily installed and transferred between models using adaptable spline sleeves.



### Reliable performance

Supports CORS networks for correction services and satellite-based augmentation, including BeiDou PPP-B2b and Galileo HAS, ensuring stable, high-precision performance-even without a network connection.



### Automatic terrain compensation

Automatically compensates for hillsides, slopes, and rough terrain, optimizing steering accuracy through sensor fusion algorithms that integrate high-precision GNSS and inertial sensor data.



### Connected field management

Securely stores field boundaries and guidance lines online, eliminating repeated land marking and saving operation time.



### Rapid installation

Highly integrated design simplifies setup, enabling installation in 30 minutes or less.



### Reliable after-sales support

Provides secure OTA software and firmware updates, supported by 24/7 after-sales service for prompt and personalized assistance.

## Specification

### System performance

Input voltage	Range: 9-32 V DC
	Typical: 12/24 V DC
Pass-to-pass accuracy	$\leq 2.5$ cm
Vehicle velocity	0.3-22 km/h
NMEA output	Connector: DB9
	Data format: NMEA 0183
	Output frequency: 1/2/5/10 Hz
Operating temperature	-20 ° C - +70 ° C
Storage temperature	-40 ° C - +85 ° C

### GNSS receiver

Constellations	BDS: B1I, B2I, B3I, B1C, B2b
	GPS: L1C/A, L2C, L5
	Galileo: E1, E5a, E5b, E6
	QZSS: L1C/A, L2C, L5, L6
RTK accuracy (RMS)	Horizontal: 0.8 cm + 1 ppm
	Vertical: 1.5 cm + 1 ppm
PPP accuracy (RMS)	Horizontal: 5 cm
	Vertical: 10 cm
Speed accuracy (RMS)	0.03 m/s
IMU accuracy	Roll/Pitch: 0.2°
	Heading: 0.3°
Radio frequency	410-470 MHz
Dust and waterproof	IP67

### Tablet

Display size	12.0-inch LCD touch screen (support 5-point touch)
Display brightness	750 nits
Resolution	1280 × 800 Pixels
Communication	GSM, UMTS, LTE
	Wi-Fi 2.4G
	Bluetooth 4.2, BLE
Dust and waterproof	IP65

### Electric steering wheel

Torque	Typical: 7 N · m
	Peak: 13 N · m
Motor speed	100 r/min (max.)
Wheel diameter	∅400 mm
Motor dimension	∅173 mm × 65 mm

### Camera

Video signal	CVBS 1080p
Resolution	1280 × 720 Pixels
Dust and waterproof	IP67