



Senyta Intelligent Equipment Co., Ltd.



029-85796416



senytaservice@gmail.com



<https://www.sydauto.com/>



Shaanxi Aerospace Power Innovation Center, No. 168 Xihu Road, Chang'an District, Xi'an, Shaanxi, China

Liucunbao Industrial Park, Fengchan Road, Weiyang District, Xi'an, Shaanxi, China (R&D Center)

Qianxing® Automatic Navigation Driving System

Product Description

A highly integrated autonomous navigation and control system designed for agricultural machinery and intelligent equipment upgrades.

The Qianxing® Autonomous Navigation System integrates navigation, autonomous driving, and IoT capabilities into a highly integrated navigation and control solution for agricultural machinery and intelligent equipment across multiple industries. The system supports optional obstacle avoidance radar and real-time video transmission, helping equipment achieve more accurate positioning, more stable path control, and more efficient intelligent upgrades.

For unmanned operation platforms, the system is more than just a navigation module. It serves as a core platform connecting sensing, control, scheduling, and management functions, providing essential support for equipment automation and unmanned operation development.



Application Scenarios:

Agricultural equipment upgrades, smart agricultural machinery retrofits, autonomous operation equipment, and navigation control systems for industrial and specialized equipment.

Product Features

- ✓ Highly integrated navigation and communication functions.
- ✓ Compatible with agricultural machinery and intelligent equipment across multiple industries.
- ✓ Supports optional obstacle avoidance radar and real-time video transmission.
- ✓ Supports equipment automation and unmanned operation upgrades.
- ✓ Integrates sensing, control, and platform management capabilities.
- ✓ Improves path planning accuracy (± 2.5 cm) and operational stabilit.

Product Parameters

Item		Unit	Specification
Physical Dimensions and Electrical Characteristics	Dimensions (L × W × H)	in. (mm)	9.2×5.9×3.1 (234×150×78.8)
	Weight	lbs (kg)	2.9 (1.3)
	Input Voltage	VDC	12
	Power Consumption	W	<5
IMU Performance Specifications	Gyroscope type	/	MEMS
	Gyroscope Input Range	°/s	±500
	Gyroscope Bias Stability	°/h	2.5
	Accelerometer Range	g	±8
	Accelerometer Bias Stability	mg	10
Environmental Specifications	Operating Temperature	°C	-10 to + 60
	Storage Temperature	°C	-50 to + 80
	Humidity	%	95% RH, non-condensing
	Vibration	/	IEC 60068-2-6

	Protection Rating	/	IP65
GNSS Specifications	Satellite Systems	/	GPS: L1 C/A ,L2P(Y) ,L2C, L5 Galileo : E1, E5a , E5b GLONASS: G1, G2 QZSS: L1, L2, L5
	GNSS Data Update Rate	Hz	5,10
	Heading Accuracy	deg./m	0.2
	Integrated Navigation Data Update Rate	Hz	100
Communication Interface	4G BLE ETH CAN RS485		

Application Scenarios



spraying operation



inspection operation



mowing operation