

CHCNAV

NX510 SE

INTEGRATED AUTOMATED STEERING SYSTEM



PRECISION AGRICULTURE

HIGH ACCURACY HANDS-FREE AUTOMATED STEERING

The NX510 SE is an automated steering system, that easily retrofits many types of new and old farm tractors and other vehicles with a compact, up-to-date and all-in-one solution at a price every farm can afford. It provides significant productivity gains, works in all visibility conditions and reduces operator fatigue.

The NX510 SE uses the latest generation integrated guidance controller, which is easier to install to avoid wasting precious time in the field. Its enhanced built-in connectivity modules include a 4G modem and an additional UHF radio modem to allow you to work with your favorite RTK correction sources from local RTK networks or GNSS RTK base stations. In addition, it can be easily transferred from one tractor to another, offering unmatched flexibility. The guidance controller featuring full GNSS constellations offers increased accuracy for optimal navigation reliability.

The combined GNSS+INS terrain compensation technology ensures hands-free driving accuracy to within a centimeter and provides superior performance in ditching, planting and harvesting applications.

2.5 CM PASS-TO-PASS ACCURACY

Absolute accuracy in challenging environments and difficult terrains.

The NX510 SE is an advanced guidance controller powered by multiple correction sources and five satellite constellations: GPS, GLONASS, Galileo, Beidou and QZSS. Its built-in 4G modem seamlessly connects to all industry standard DGPS and RTK corrections to achieve centimeter accuracy steering. In addition, roll and yaw terrain compensation technology maintains high accuracy, even in challenging environments and terrain.

FAST, EASY-TO-USE AND RUGGED DISPLAY

Intuitive AgNav software to control all operations at your fingertips.

AgNav multilingual software, operating on a 10.1-inch industrial display, supports multiple guidelines patterns, including AB line, A+ line, circle line, irregular curve and headland turn, to handle all common farming operations. The intuitive AgNav software enhances the user experience in every way to complete field operations with high speed and accuracy.

ENHANCED CONNECTIVITY STEERING CONTROLLER

Work with your favorite RTK correction via 4G GNSS networks or UHF base stations.

The NX510 SE is an automated steering system that can be fully installed in less than 40 minutes on most farming vehicles, significantly eliminating costly downtime. The auto-steering system features enhanced built-in connectivity, including multiple CAN ports, serial ports, Bluetooth 4.1, a 4G modem and even its on-board UHF radio modem. ISOBUS compatibility with all major brands of equipment provides an optimal response to demanding agricultural applications and improves field operations.

RUGGED DESIGN AND PROVEN RELIABILITY

Extended durability in farming environments.

The NX510 SE' industrial design incorporates dust and waterproof components (IP65 rating), perfectly suited for use in the agricultural environment. In addition, the durable, high-torque steering wheel ensures fast and reliable entry on lines.

 **INTEGRATED
AUTOSTEERING
SYSTEM**



Console

Rugged to adapt to a harsh working environment.



UHF Radio

Standard build-in UHF radio module.



Electric Wheel

High rotating speed achieves fast entry in line.



AgNav software

The user-friendly interface makes operation faster.

SPECIFICATIONS

| Positioning Accuracy | |
|----------------------------|---|
| Real time kinematics (RTK) | Horizontal: 8 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS Initialisation time: < 10 s Initialisation reliability: > 99.9% |
| Velocity accuracy | Horizontal: 0.007 m/s RMS Vertical: 0.020 m/s RMS |

| Performance | |
|---------------------------------|-----------|
| Linear autopilot deviation | ≤ ±2.5 cm |
| Curve autopilot deviation | ≤ ±10 cm |
| Straight line spacing deviation | ≤ ±2.5 cm |

| Physical | |
|----------------|--|
| External power | 9 V DC to 36 V DC |
| Environment | Operating: -20°C ~ +75°C Storage: -40°C ~ +85°C |

| Electrical Steering Wheel | |
|---------------------------|-------------------|
| Power input | 9 V DC to 36 V DC |
| Torque | 10 N·m |
| Wheel diameter | 410 mm |
| Motor height | 87.5 mm |

| Display | |
|---------|---|
| Display | 10.1" touch screen, 281 mm x 181 mm x 42 mm Android 6.01 Dust and Waterproof: IP65 |

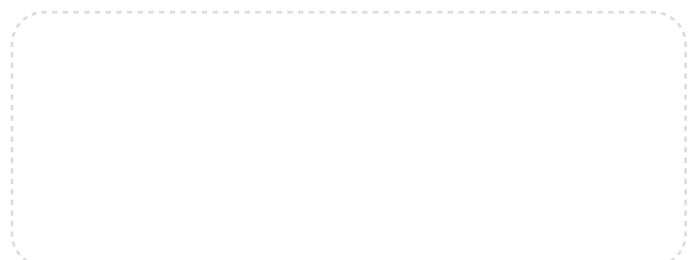
| Rear Camera | |
|----------------------|------------------|
| Pixel | 658 x 462 pixels |
| Camera angle of view | 120° |

| Receiver | |
|---------------------|-------------------------|
| Size | 219 mm x 205 mm x 60 mm |
| Weight | < 2 kg |
| Power | 9 V DC to 36 V DC |
| Dust and waterproof | IP67 |

| Constellations | |
|----------------|------------|
| GPS | L1/L2/L5 |
| BDS | B1/B2/B3 |
| Galileo | E1/E5a/E5b |
| GLONASS | L1/L2 |
| SBAS | L1 |
| QZSS | L1/L5 |

| Communication and Data | |
|------------------------|--|
| Bluetooth | v 4.1 |
| Serial port | RS232 x 2 |
| CAN ports | 2 |
| NMEA output | 1/2/5/10 Hz |
| Correction formats | RTCM3.0, RTCM3.2 |
| 4G Network modem | Integrated in receiver and in display |
| UHF module | Frequency: 410-470 MHz Protocol: TT450S/Transparent/HUACE |
| Output interface | 3 x LEDs (power, satellite, RTK correction) 1 x UHF antenna connector |

* Specifications are subject to change without notice.



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