

NX200 System

Precision Agriculture

- ± 2.5 cm lateral deviation accuracy for auto steering
- Multiple work modes (AB line, equidistant curve, adaptive curve, circular curve, Z-line)
- Graphical display of movement
- One system for versatile functions
- Diversified operating system support
- Multi-functional and friendly interactive AG software

Geodesiteal



NX200 Control Box

- Highly integrated inertial navigation, GNSS and control unit modules.
- Industrial aerospace materials, dust and water proof.
- High functional expandability such as satellite level, seeding monitor, dispatch monitor.

Hydraulic Valve

- High-precision proportional hydraulic valve.
- Universal hydraulic valve, suitable for all open center, and closed center hydraulic system.
- Wide range of hydraulic flow, suitable for a variety of models.

LCD Screen

- 8" TFT LCD panel, LED backlight.
- Four-wire resistive touch, responsive, easy to operate.
- Industrial anti-glare coating surface, solid and reliable, touching without leaving traces.

Antenna

- Dual antenna with GPS/GLONASS/BDS/Galileo for gaining high quality POS data.



■ Technical Specifications

System

- Operating System: Linux 2.3.6.3

GNSS Accuracies⁽¹⁾

- Real Time Kinematics (RTK):
 - Horizontal: 8 mm + 1 ppm RMS
 - Vertical: 15 mm + 1 ppm RMS
 - Initialization time: < 10 s
 - Initialization reliability: > 99.9%
- Velocity accuracy:
 - Horizontal: 0.007 m/s RMS
 - Vertical: 0.020 m/s RMS

Communications and Data Recording

- Network Modem:
 - Control Box: Internally integrated 3G modem
 - LCD Screen: Internally integrated 3.5G modem
 - HSPA+ 21Mbps (download), 5.76 Mbps (upload)
 - WCDMA 850/900/1700/1900/2100
- WiFi: 802.11 b/g/n, support AP
- Protocols:
 - CMR, CMR+, SCMRX input and output
 - RTCM 2.x, RTCM 3.x input and output
 - NMEA 0183 output
- Output Frequency for Positioning: <20 HZ
- UHF Radios⁽²⁾: Protected TNC Female
 - Protocol: CHC, Trimble, Pacific Crest
- Pilot Mode: Auto or manual

Performance

- Vehicle Velocity Range: ≤ 36 km/h
- Linear Autopilot Deviation:
 - $\leq \pm 2.5$ cm (agricultural machinery speed ≤ 1.5 m/s)
 - $\leq \pm 4$ cm (agricultural machinery speed ≤ 2.5 m/s)
- Curve Autopilot Deviation:
 - $\leq \pm 10$ cm (agricultural machinery speed ≤ 2.5 m/s)
- Straight Line Spacing Deviation:
 - $\leq \pm 2.5$ cm (agricultural machinery speed ≤ 1.5 m/s)
 - $\leq \pm 4$ cm (agricultural machinery speed ≤ 2.5 m/s)
- Distance of Into the line: ≤ 10 m to 15 m ($\pm 60^\circ$)

Physical

- External Power: 9 V DC to 36 V DC
- Environment
 - Operating: -40°C to $+70^\circ\text{C}$ (-40°F to $+158^\circ\text{F}$)
 - Storage: -50°C to $+85^\circ\text{C}$ (-58°F to $+185^\circ\text{F}$)
- Operating Time⁽³⁾: Continuous running 7 × 24 h

Navigation Monitor Performance

- Operating Time⁽³⁾: Continuous running 2 × 24 h
- Display:
 - Size: 7" touch screen
 - System: Windows XP, Windows 7
 - Dust and Water Proof: IP65

Key Components and Structural Description

- Input and output interfaces:
 - 2 × external GNSS antenna interfaces
 - 1 × radio interface
 - 1 × 3G network antenna
- Pilot Lamp: 3 LEDs (power light, satellite light, differential signal), the liquid crystal panel (radio channel)

(1) Accuracy and reliability specifications may be affected by multipath, satellite geometry and atmospheric conditions. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices. (2) UHF is an option and UHF type approvals are country specific. (3) Operating time varies based on temperature.

Specifications are subject to change without notice.

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