

Precision Agriculture





HARXON CORPORATION, a company of BDStar, has been dedicated to delivering advanced agricultural GNSS solutions that are easy to use and affordable. With dedicated customer service and innovative products, we have grown to become one of the world's leading aftermarket suppliers of GNSS precision solutions for agriculture. Harxon's products are found in the control, guidance and steering systems of the top precision agriculture, implement and vehicle manufacturer's products, with the field proven reliability, our GNSS solutions optimize farmer's productivity and efficiency, allowing them to save time, lower cost and increase profits.

## **Agricultural Guidance and Control System**

Agricultural Vehicle Guidance System generally refers to precision positioning system, auto-steering system, application control system and terminals. Harxon's products focus on high precision GNSS positioning system for ground agriculture and have a solid reputation within the industry, keeping the vehicle on path within less inches. Which means the growers could complete more of their work in less time, the more precise they are on each pass, the closer they come to eliminate overlap. Improve your bottom line by reducing input, labor, fuel, and hours on the equipment.





## **GNSS Antennas**

Precision agriculture has enabled farms to continue to improve crop yields and at the same time minimize the application of fertilizer, herbicides and pesticides. This also minimizes the effect on the environment and improves profit. To achieve centimeter-level accuracy, GNSS antennas must have a precise phase center offset and low phase center variation. L-band correction services are also often required to offer centimeter-level positioning. Harxon's multi constellation and multi frequency technology is necessary to provide the precision that many applications require. We offer a broad range of economical, high performance antennas employing its patented technologies for today's multi constellation world.

- ► Accurate and precise positioning with Harxon's patented antenna technology
- ▶ Comprehensive support GNSS signals from GPS, GLONASS, Galileo, BeiDou and SBAS services
- ► Millimeter PCV repeatability
- Excellent multi-path rejection for superior performance in high multi-path/reflection environments
- ► OEMs with a custom antenna solution







Ruggedized GNSS Antenna



## Radio Technology

Harxon's radio technology provides an independent solution based on quality, reliability, continuity and low life cycle cost. Our radio technology is used worldwide in machine control applications, such as precision farming, construction and surveying. It is perfect for mission-critical operations. The product performance is consistent and reliable. And we help our customer to find the products that suit their needs the best, keeping in mind the right frequency ranges, compatibility with other system providers and operating environments. Our radio products are the safe way to ensure availability even in areas with limited coverage or no coverage at all.

- ► High Sensitivity, low error rate, exceptional anti-interference performance
- ▶ Different UHF frequency variants available
- Transmitter and Receiver integrated, can be used as repeater
- ► Radio network and 4G network available
- ▶ Versatile mounting options, compatible with major communication protocols on the market
- ► Tailored OEM Solution available



**UHF Radio Modems** 



Dual-Band Radio Modems



Dual-Mode Radio



## Harxon Smart Antenna Family



TS100 series



TS300 series

Reliable, Scalable, Affordable

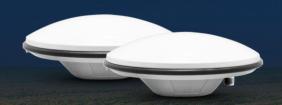
Harxon SMART antennas integrate our high –performance GNSS antennas, radio modems and GNSS receivers in rugged, durable housings, access to multiple GNSS signals allow for better satellite availability under variable terrain and environmental conditions. SMART antenna is available with optional Bluetooth technology, 3G/4G modules, built-in radio modems to provide wireless connectivity.

- ▶ Multi-Constellation for enhanced positioning, tracking GPS, GLONASS, Galileo, BeiDou signals quickly.
- ▶ Smooth, consistent positions for pass-to –pass applications with T-DIFF technology, keeps your agricultural vehicle on path.
- ▶ Powered by Standalone algorithmic technology, consistent RTK positioning accuracy for a certain period even RTK differential link is disconnected.
- ▶ With integrated tilt compensation, guidance and auto-steer performance on uneven terrain is improved.
- ▶ Optional 3 magnet mountings for maximum flexibility.



TR206 is Harxon's multi-GNSS, multi-frequency receiver designed specifically for applications that require continuous centimeter positioning and heading accuracy. By integrating GNSS performance and connector flexibility into ruggedized IP67 rating housing, TR206 provides high dynamic signal reception with high sensitivity and low latency, and is ideal for agricultural vehicles that working on uneven terrains. It supports multiple ways of data transmit, offering flexibility for different applications.

- ► Comprehensive GNSS support: GPS, Galileo, GLONASS, BeiDou
- ▶ Adopts TDIF technology and Standalone algorithm for better accuracy on uneven terrains
- ► Offers heading accuracy to 0.2 degree RMS
- ▶ Dual-antenna for rapid heading alignment (within 40s)
- ► Flexible data links for easy transmit: Radio, 4G



**GNSS Antennas** 



Receiver TR206



































