

Harxon Initiates Early Bird Plan for TS112 Smart Antenna Family

With potential benefits of higher production efficiency, enhanced operation safety while dwindling farming labor force and resources input, autonomous navigation system for agricultural machines is an essential part of today's precision agriculture. Many field operations such as sowing, tilling, planting, cultivating, weeding and harvesting have widely adopted satellite based autonomous guidance technology as an indispensable option for agricultural machines.



To empower and boost the autonomous guidance development of farm vehicles as always, Harxon initiates an early bird plan (start from May 21, 2021 and expire at September 30, 2021) for trial of its latest TS112 smart antenna family to provide scalable and reliable positioning solutions for agricultural environments that have uneven grounds, underground cables, and complicated environmental conditions (rain, fog, dust, etc.). Of the advanced TS112 smart antenna family, there are three models, namely TS112 SE, TS112, and TS112 PRO. Get more info about the campaign by reaching our sales team at your convenience.

The TS112 PRO embeds a Harxon X-Survey™ technology 4in1 multifunctional GNSS antenna (4G, Bluetooth and Wi-Fi antennas integrated) and a future-ready Hexagon | NovAtel OEM GNSS module in one compact enclosure. The integrated high gain and wide beam width multi-constellations GNSS antenna features a multi-point feeding technology, ensuring a high phase center stability for ultimate RTK centimeter level positioning accuracy, which is realized by subscribing Ntrip service via LTE network for corrections transmit or setting up a local base station using radio for wireless corrections transmit. The Hexagon | NovAtel GNSS module is factory default enabled for RTK function.

By adopting the Hexagon | NovAtel OEM GNSS module that offers precise positioning and advanced interference mitigation for space constrained applications and challenging environments, there is another option to achieve globally available centimeter level positioning accuracy by utilizing TerraStar satellite-delivered L-Band correction services, no need for setting up expensive network infrastructure.

The TS112 PRO also features GLIDE smooth positioning technology that offers superior pass-to-pass accuracy down to 20 centimeters for applications where relative positioning is critical.



TS112 PRO Smart Antenna

The TS112 integrates u-blox F9P GNSS module with multi-band GNSS receiver and the Harxon's latest 4in1 multifunctional GNSS antenna in one compact housing. It supports dual frequency multi-constellations for consistent and robust satellite signal tracking and delivers RTK level positioning accuracy for autonomous guidance of agricultural and construction vehicles.

It features the Harxon patented SLIDE™ technology to provide smooth positioning and exceptional linear accuracy and Harxon terrain compensation algorithm that is capable of correcting deviations that caused by vehicle's roll and pitch while working on uneven grounds or slopes.

It also supports 4G and radio modem for flexible corrections transmission as well as wireless Bluetooth technology for easy connectivity in the field.



TS112 & TS112 SE Smart Antenna

The TS112SE, an entry-level positioning solution, provides flexible positioning via standalone positioning or dual-frequency precise point positioning (PPP) with accuracy from sub-meter to centimeter level while using the SAPCORDA Safe and Precise Augmentation (SAPA) service for various applications, so there is no need for costly hardware replacement.

Its comprehensive support and L-band correction service ensure solid satellite tracking without signal outage, even on uneven terrains or in problematic environmental conditions. The SAPA precise augmentation service works as a reliable alternative economical positioning option with wide service coverage in the application environment that has poor LTE network coverage.