

# Harxon Announces Virtual Launch of Smart Antennas Family



Harxon has just launched its TS112 family of smart antennas, designed for demanding applications such as autosteering systems for agricultural machinery that require high positioning-accuracy solutions. The newly released TS112 family features Harxon's latest GNSS positioning technology and offers scalable positioning solutions with increased GNSS availability, reliability and

accuracy.



The TS 112 family comprises three models, namely TS112 PRO, TS112, and TS112 SE. A Harxon X-Survey technology 4in1 multifunctional GNSS antenna is embedded in each family model which integrates 4G, Bluetooth and Wi-Fi in one compact unit. This high-gain and wide-beamwidth multi-constellation GNSS antenna features a multi-point feeding technology, ensuring a high phase centre stability and ultimate RTK centimetre-level positioning accuracy.

The TS112 SE, the most affordable solution of the three, provides flexible positioning solutions via standalone positioning or dual-frequency precise point positioning (PPP), with accuracy from sub-metre to centimetre level, while using the SAPA precise augmentation service. Its comprehensive support and L-band augmentation service ensures solid satellite tracking without signal outage even on terrains or in problematic environmental conditions. The SAPA precise augmentation service works as a reliable alternative economical positioning option with wide service coverage in an application environment that has poor LTE network coverage.



Harxon TS112 smart antenna family.

## Space-constrained applications

The TS112 integrates a high-precision GNSS module with a multi-band GNSS receiver and [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 precision agricultural equipment and machine control. It offers a 4G and UHF radio modem for flexible correction transmission as well as wireless Bluetooth technology for easy connectivity in the field.

The TS112 PRO employs Novatel's future-ready OEM GNSS module, offering precise positioning and advanced interference mitigation for space-constrained applications and challenging environments. With centimetre-level positioning utilizing TerraStar satellite-delivered correction services, Harxon's TS 112 PRO ensures globally available, high-performance positioning without the need for network infrastructure. Harxon's TS112 PRO also supports a NTRIP service. This means that in application environments where it is not feasible to use a base station, the NTRIP differential corrections can be transmitted to a rover using 4G networks and enable users to achieve ultimate centimetre- level positioning accuracy.



Harxon's senior product manager at the launch.

## Terrain compensation algorithm

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

All models in the TS112 family support Harxon SLIDE technology to provide smooth positioning and exceptional linear accuracy so that the guiding system can continue to guide during satellite signal outages or in challenging environments.

The newly released family also supports Harxon's terrain compensation algorithm that is capable of correcting deviations caused by a vehicle's roll and pitch while working on uneven ground or slopes. It is developed to help users increase operational efficiency and to save costs in the field.

---

<https://www.gim-international.com/content/news/harxon-announces-virtual-launch-of-smart-antennas-family>

---