

Harxon unveiled advanced GNSS solutions at Intergeo 2023



Harxon demonstrated its dedication to innovation at Intergeo 2023 by introducing two products designed to advance high-accuracy positioning within the geospatial industry: the Survey GNSS Antenna (HX-CSX600A) and the Helix Antenna (HX-CUX615A). Harxon is a prominent provider of positioning technology in the mapping and surveying sector.

Survey GNSS Antenna HX-CSX600A: precision and performance redefined

Harxon's Survey GNSS Antenna HX-CSX600A represents a significant advancement in precision technology, boasting an impressive 7dBi peak gain. This state-of-the-art antenna sets new benchmarks for industry standards in accuracy. With a robust pre-filtered Low Noise Amplifier (LNA) designed for effective out-of-band interference rejection, the HX-CSX600A ensures consistent performance, even in challenging environments. Tailored for high-precision GNSS applications, including use in agricultural vehicles, small robots and surveying, this antenna is a top choice for achieving pinpoint accuracy.

The HX-CSX600A's features include consistent performance across a broad spectrum of frequency bands and compatibility with various satellite systems, such as GPS, GLONASS, Galileo, BeiDou, QZSS, IRNSS, SBAS and L-Band correction services. Advanced multipoint feeding technology ensures a stable phase centre variation, offering a minimum gain of 5.5dBi at Zenith across all frequency bands (with a maximum of 7dBi). This antenna excels in anti-interference performance, even in environments near communication base stations or urban areas. Moreover, its capability to track low-elevation signals with high gain and a wide beam width makes it an ideal choice for applications in obstructed environments like forests and construction sites. The [HX-CSX600A](#) is housed in an IP67-rated compact and ruggedized housing, designed to withstand dust, rain, sunlight, shock and vibration. Its standard TNC-K connector and pole mount facilitate easy installation and integration.

Helix Antenna HX-CUX615A: low profile, high precision and exceptional compatibility

The Helix Antenna [HX-CUX615A](#), a housed version of HX-CUX012A, represents a high-performance solution ideally suited for uncrewed aerial vehicle (UAV or 'drone') applications, including aerial photography, remote sensing, infrastructure inspection, traffic control and public security. Notably, this antenna boasts a low profile, standing at just 33mm, and weighs a mere 43g, making it a perfect fit for seamless integration into UAVs and various geospatial devices. Its low weight significantly reduces the overall payload, meeting the stringent requirements for lightweight solutions.

The HX-CUX615A ensures high phase centre stability with centimetre-level accuracy, boasting a high peak gain of 3.0 dBi and excellent axial ratios, which enable exceptional multipath mitigation and a very precise phase centre. It also excels in anti-interference performance thanks to its robust pre-filtered LNA, effectively mitigating unwanted electromagnetic interference and providing reliable GNSS signals for seamless integration into positioning solutions. The antenna adopts patented Dual-Quadrifilar Helix Antenna (D-QHA) technology, ensuring stable wide-angle circular polarization performance, even in challenging environments.

The official launch of these two groundbreaking products at Intergeo 2023 was met with enthusiasm. The Harxon team behind these innovations provided live demonstrations and answered questions from attendees. In doing so, [Harxon](#) clearly demonstrated the value it offers to the diverse geospatial business landscape.