

Tallysman Introduces Full-Band GNSS Helical Antenna



Tallysman Wireless has announced the addition of its first full-band GNSS antenna to its industry-leading line of Helical antennas.

The full-band GNSS HC990E embedded helical antenna is designed for precise positioning, covering the GPS/QZSS-L1/L2/L5, QZSS-L6, GLONASS-G1/G2/G3, Galileo-E1/E5a/E5b/E6, BeiDou-B1/B2/B2a/B3, and NavIC-L5 frequency bands, including the satellite-based augmentation system (SBAS) available in the region of operation [WAAS (North America), EGNOS (Europe), MSAS (Japan), or GAGAN(India)], as well as L-band correction services.

Lightweight UAV navigation

The antenna is designed and built for high-accuracy positioning. It is packaged in a very light and compact form factor, making it suitable for a wide variety of applications, especially lightweight unmanned aerial vehicle (UAV) navigation.

The HC990E is 60mm wide and 25mm tall, weighing only 12g. It features a precision-tuned helical element that provides an excellent axial ratio and operates without the requirement of a ground plane. The HC990E also features a low-current, low-noise amplifier (LNA) and pre-filter to prevent harmonic interference from high-amplitude signals, such as 700MHz band LTE and other nearby in-band cellular signals.

The HC990E antenna base has a flying lead with a UFL connector. To facilitate the installation, [Tallysman](#) provides an optional embedded helical mounting ring, which traps the outer edge of the antenna circuit board to the host circuit board or any flat surface. Tallysman also supports the installation and integration of embedded helical antennas to enable successful implementation and provide optimal antenna performance.