

Beyond the GNSS RTK Survey

Equipped with 1408 channel GNSS and iStar technology

The i83 GNSS Smart Antenna delivers centimeter accuracy in seconds and maintains reliable fixed RTK accuracy even in generally challenging environments. The Quick Start feature allows you to get up and run within 30 seconds of powering up the receiver, allowing you to collect points faster than ever before when moving from location to location. The third generation high gain antennas improve tracking efficiency of GNSS satellite signals by up to 30% and provide accurate survey grade positioning when using GPS, Glonass, BeiDou, Galileo, and QZSS constellation. Integrated iStar technology ensures optimal GNSS RTK surveying across all GNSS survey applications.



Designed for field use

Runs for 18 hours on a single charge and works reliably when needed

i83 GNSS Ultra Low Power SoC (System-on-Chip) Electronic design and smart power management significantly reduces GNSS research time and eliminates the need for spare batteries or external batteries. Autonomous operation is achieved for up to 18 hours when operating as a GNSS RTK network probe and up to 9 hours when operating as an RTK base station. The i83 GNSS is charged from a power bank or a standard USB-C charger. Regardless of when and where the GNSS investigation is carried out, the i83 GNSS" magnesium alloy body is shock-resistant, dust-resistant and waterproof, ensuring uninterrupted performance even in the most demanding field conditions.



Smarter connections than ever

Unparalleled Universal GNSS Receiver

The i83 GNSS has all the connectivity capabilities needed for surveyors to complete their GNSS Survey Project scenarios. Built-in Wi-Fi, Bluetooth and NFC technologies allow for seamless connectivity to field data controllers and tablets. The integrated 4G and UHF modems allow for any GNSS survey mode, from RTK Networks NTRIP connections to UHF base rover configurations. GNSS RTK compensation is continuously accessed or broadcasted to ensure accurate positioning in any situation. A high-resolution color display provides a clear view of the i83 GNSS status. Whether you are setting up as a UHF RTK base station, recording raw data for further GNSS post-processing, or simply using it as a UHF or 4G network rover, you have full control over your survey operations.



A GNSS research tool that anyone can use

Efficient IMU-RTK Survey Easily

Automatic polar tilt compensation with the i83 GNSS built-in IMU increases the speed and efficiency of surveying, engineering and mapping by up to 30%. Real-time, interference-free initialization of the 200 Hz inertial module takes just 5 seconds, ensuring accuracy of 3 centimeters over a pole tilt range of up to 30 degrees. Measurement and piling using the i83 GNSS is quick, easy and productive, whether you are an engineer, a site supervisor or a surveyor.

overview

The i83 GNSS receiver is more than a universal 1408-channel multiband IMU-RTK GNSS receiver, and is the perfect GNSS RTK surveying tool that surveying, construction and mapping experts expect. Built-in connection modules such as Wi-Fi, Bluetooth, NFC, UHF, 4G modems are reliable, efficient and convenient to use in a variety of application scenarios for any field configuration.

The i83 GNSS features CHCNAV's third generation GNSS antenna and the latest iStar algorithm, increasing all GNSS signal tracking efficiency by 30%. It also integrates high-quality, no-calibration IMU sensors, which greatly improves the ease of use and reliability of RTK GNSS research. Designed for extended field use and robust performance, the i83 GNSS smart power management technology allows RTKrover to operate continuously for up to 18 hours. The i83 GNSS offers unparalleled productivity for GNSS measurements, piling surveys, and other common construction operations.