

ViLi i100

Versatile Visual-LiDAR RTK



Once Right, Always Right

Confident and Consistent Accuracy in Obstruction.



SFix 2.0

Reliable 0.16 US ft Accuracy within 66 US ft in GNSS-Denied Areas.



Real-Time 3D Point Cloud Earthwork Calculation:

Accurate, Fast & Safe.



Vi-LiDAR:

Take a Photo, Capture Points to Survey, No Need to Aim or Stay Rock-Steady.



All-in-One Flagship GNSS Receiver:

With All Conventional Features Involved.

HIGHLIGHTS

The ViLi i100 is CHCNAV's flagship Visual-LiDAR GNSS RTK receiver for next-generation of high-precision surveying. With advanced GNSS satellite signal filtering, multi-sensor fusion, SFix 2.0 algorithms, and integrated Vi-LiDAR, it ensures consistent centimeter-level accuracy.

Designed for complex environments, the ViLi i100 enables precise data collection across diverse terrains, enabling users to work confidently even beyond the traditional limits of GNSS.

i85

Pocket-Sized Laser IMU-RTK GNSS



LASER SURVEY

Laser rangefinder captures survey-grade 3D coordinates from hard-to-reach points.



EXTREME GNSS PERFORMANCE

CHCNAV iStar2.0 GNSS engine and advanced GNSS module, 96% fix reliability with 20% improved data quality.



VISUAL NAVIGATION AND STAKEOUT

GNSS, IMU, and visual sensor fusion, powered by a 1.5 GHz processor with adaptive Wi-Fi VPT™ technology.



AUTO-IMU

200 Hz AUTO-IMU with no manual initialization. Maintains 1.18 in accuracy over a 60° tilt range, reducing field time by up to 30%.

HIGHLIGHTS

The CHCNAV i85 is a compact, high-performance GNSS solution for daily land surveying. Featuring a 1408-channel GNSS module, advanced IMU, integrated dual cameras, and laser rangefinder, it delivers reliable positioning in challenging environments, even under high solar activity. Weighing 1.76 lb with an IP68 rating and 20-hour battery life, the i85 ensures efficient, dependable RTK performance in the field.

i93

Versatile IMU-RTK with Vision



Visual Surveying

Dual cameras extract survey-grade 3D coordinates improving measurement efficiency.



Visual Stakeout

Guidance by a clear, eye-catching directional information.



3D Modeling

Dynamic panoramic video capture.



Auto-IMU Technology

200 Hz Auto-IMU for automatic pole tilt compensation.

HIGHLIGHTS

The i93 GNSS receiver is an extremely versatile RTK that integrates the latest GNSS, IMU, and premium dual-camera technologies for a more compelling user experience. The visual stakeout streamlines construction layout with intuitive AR visual guidance, boosting on-site efficiency. Visual survey leverages video-photogrammetry to capture precise data from hard-to-reach, signal-obstructed, and hazardous areas. Seamlessly compatible with leading 3D modeling software, it perfectly complements aerial oblique imagery surveys for comprehensive 3D modeling. Enhanced by iStar RTK algorithm and multi-band GNSS, it delivers reliable high-accuracy positioning in tough conditions. Auto-IMU with automatic initialization eliminates manual setup, simplifying field operations. The i93 is the ideal solution for completing tasks faster, more accurately, and more efficiently.

i83

Pocket-Sized Visual IMU-RTK GNSS



Comprehensive Connectivity



1408-Channel GNSS



IMU Tilt Compensation



Rugged Design



HIGHLIGHTS

The i83 GNSS receiver is a powerful IMU-RTK GNSS solution built for surveying, construction, and mapping professionals. Equipped with Wi-Fi, Bluetooth, NFC, UHF, and a 4G modem, it delivers versatile connectivity across multiple applications. Its power management allows 34 hours of continuous RTK rover operation, ensuring reliable performance for extended fieldwork.

iBase

Integrated GNSS Base for Optimal Ease of Use



13 H+ Endurance



25 KM Coverage



Ultra Base



Premium GNSS



HIGHLIGHTS

The iBase GNSS receiver offers a streamlined solution as a GNSS base station designed to meet surveyor's needs. Its performance rivals that of a standard external UHF radio modem without the bulk of external batteries, cables, radios, and antennas. With a 5-watt radio module, it provides GNSS RTK coverage up to 15.53 miles under optimal conditions. Its real-time UHF interference self-checking capability allows operators to select the best frequency channel, increasing ease of use and efficiency. In addition, iBase's integrated AUTO-IMU enhances its functionality as a GNSS rover.