Software

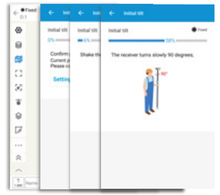
Survey Master

Optional

Microsurvey FieldGenius Android

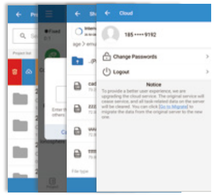
Microsurvey FieldGenius Windows

Compatible with most of Android devices
Easier survey workflow via Wizard function
Support up to 60° IMU tilt compensation
Support all survey modes, including Static, PPK and RTK
Support Surface Stake, Mapping Survey and etc. to serve various survey tasks
Support CAD import and directly use for stake out operations
Support Convert function from ComNavBinary raw file to RINEX



IMU Tilt Survey

CAD Basemap and Stake

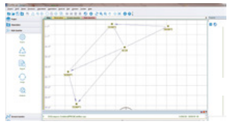


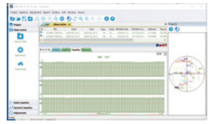
Cloud Service

Post-processing Software

SinoGNSS Compass solution software

Provide the complete GPS/GLONASS/BeiDou/GALILEO post-processing solution
Support GNSS observation data in RINEX and ComNav Raw Binary Data formats
Support different post-processing in static and kinematic modes
Output analysis reports in various formats (web format, DXF, TXT, KML)
Supports DJI's P4R data format. Processing results can be imported into photogrammetry and 3D modeling software directly





N3 IMU GNSS Receiver

GNSS Surveying System
Ver.2025.08.06

Signal Tracking

Channels: 1198
GPS: L1 C/A, L2C, L2P, L5
BeiDou: B1I, B2I, B3I
BeiDou Global Signal: B1C, B2a, B2b
GLONASS: L1 C/A, L1P, L2 C/A, L2P
Galileo: E1, E5a, E5b, E6, E5 AltBOC
QZSS: L1C, L2, L5, L1C/A
IRNSS: L5
SBAS: WAAS, EGNOS, MSAS, GAGAN,SDCM
L-Band[1]

Performance Specifications

Cold start: <50 s
Warm start: <30 s
Hot start: <15 s
Initialization time: <10 s
Signal re-acquisition: <1.5 s
Initialization reliability: >99.9%

Positioning Specifications

Mode	Accuracy
Static and Fast Static	2.5 mm + 0.5 ppm Horizontal 5 mm + 0.5 ppm Vertical
Long Observations Static	3 mm + 0.1 ppm Horizontal 3.5 mm + 0.4 ppm Vertical
Real Time Kinematic	8 mm + 1 ppm Horizontal 15 mm + 1 ppm Vertical
DGPS	<0.4 m RMS
SBAS	1 m 3D RMS
Standalone	1.5 m 3D RMS
PPP	10cm Horizontal and 20cm Vertical

Communications

1 Serial port (7 pin Lemo)
- Tx/Rx with full frequency range from 410-470MHz
- Transmit power: 0.5W, 1W, 2W adjustable
- Air Baud Rate: 9600/ 19200/ 11000 adjustable
- Range: 3-15 km
- Protocol type: support Transparent/TT450S/South/Mac/SNLonglink, compatible with all the ComNavTech GNSS Receivers

WIFI: 802.11b/g/n
4G modem
-LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28
-LTE-TDD: B38/B39/B40/B41
WCDMA: B1/B2/B4/B5/B6/B8/B19
GSM: B2/B3/B5/B8
Position data output rates: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz
5 LEDs (indicating Satellites Tracking, RTK Corrections Data, GPRS Status and Power)
2 Function buttons for Power and Static Data Record
Bluetooth® : V 4.0 protocol, compatible with Windows OS and Android OS

Calibration-free IMU integrated for Tilt Survey
Up to 60°tilt with 2.5 cm accuracy

Data Format

Correction data I/O:
- RTCM 2.X, 3.X, CMR (GPS only), CMR+ (GPS only)

Position data output:
- ASCII: NMEA-0183 GSV, RMC, HDT, VHD, GGA, GSA, ZDA, VTG, GST; PTNL, PJK; PTNL, GGK
- ComNav Binary update to 20 Hz

Physical

Size(W × H): Φ 15.5 cm × 7.3 cm
Weight: 1.2 kg with two batteries

Environmental

Operating temperature: -40 °C to + 65 °C (-40 °F to 149 °F)
Storage temperature: -40 °C to + 85 °C (-40 °F to 185 °F)
Humidity: 100% non-condensing
Waterproof and dustproof: IP67, protected from temporary immersion to depth of 1 m
Shock: Designed to survive a 2 m drop onto concrete

Electrical and Memory

Input voltage: 6-28 VDC
Power consumption: 1.7 W[4]
Li-ion battery capacity: 2 × 3400 mAh, 7.4V, up to 24 hours typically
Memory: 8 GB[5]

Software

Survey Master Android-based data collection software
Carlson SurvCE field data collection software (optional)
MicroSurvey FieldGenius field data collection software (optional)

1. PPP service is optional.
2. UHF modem is default configuration and it can be removed according to your specific needs.
3. Working distance of internal UHF varies in different environments, the maximum distance is 15 Km in ideal situation.
4. Power consumption will increase if transmitting corrections via internal UHF.
5. 8GB is the default internal memory and optional 16GB, 32GB is available to order. Please clarify when placing the order.

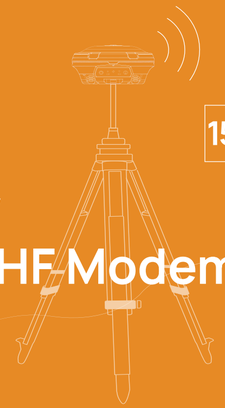
Specifications subject to change without notice.

N3 IMU

GNSS RECEIVER

Reliable IMU and Enhanced UHF bring you a brand new high-efficiency experience! *

N3 IMU GNSS Receiver



Up to 15km long work range with 2W power consumption, making it work-efficient and energy-saving for your survey tasks.
Integrated UHF ranges from 410 to 470 MHz.

Higher Efficiency with Enhanced UHF Modem

Simplified IMU initialization process with shaking poles only.
Up to 60° tilt compensation within 2cm accuracy, no need to center the bubble. Convenience and reliability are guaranteed at the same time.

More Convenient with Integrated IMU Module

Features

Full constellations tracking
Powerful tracking capability with 965 Channels
Support all current and future GNSS constellations
Improved fixed rate by integrated with new anti-interference algorithm technology

24 hours long-lasting batteries
Last for 24hrs' work time
Support hot swap and mobile charging, no worry about power off

Enhanced UHF* for long range
Up to 15km work range with 2W power consumption
Integrated UHF ranges from 410 to 470 MHz

Rugged housing
Magnesium-aluminum alloy housing
IP67 waterproof and dustproof level
Survive a 2m drop onto concrete

Reliable IMU for 60° tilt survey
Support up to 60° tilt compensation
Reach 2cm accuracy with tilt survey

Powerful web-based UI
Available for users to check status and configure receiver via the web UI
Easily download the static data & upgrade firmware via Wi-Fi

Industry-leading low power consumption
1.7w power consumption in static mode, which prolongs working time and reduces heat generation

Seamlessly work with GNSS network
Support GNSS industry common protocols
Perfectly work with all kinds of CORS worldwide with in-built 4G modem

* UHF is removable according to specifc regulation in different countries.

R50 Data Collector

QC Quick Charging | Large Capacity | 5.5" Display | Android 12 | Ultra-long Range Connectivity | NFC | Qualcomm | IP67