



Size: 15.5 cm × 7.3 cm

Weight: 1.2kg with two batteries

Features

GPS L1/L2/L5, BeiDou B1/B2/B3, GLONASS L1/L2, Galileo E1/E5a/E5b/ AltBOC, SBAS, QZSS, IRNSS¹

BeiDou Global Signal B1C, B2a

Built-in IMU supports tilt compensation up to 60°

Two 3400 mAh hot swap Batteries

Low Power Consumption

Support PPP and L-Band²

N3 - SE GNSS Receiver

ULTRA-RELIABLE GNSS

SinoGNSS N3 - SE GNSS Receiver is an extremely compact designed receiver, tracking all current and planned Global GNSS constellations, as well as L-Band capability. With the QUANTUM™ algorithm and second generation SinoGNSS ASIC chip inside, it largely improves positioning reliability and stability, especially in obstacle environments.

CUTTING EDGE IMU TILT PERFORMANCE

Up to 60 ° tilting compensation, no need to center the Bubble, enables N3 - SE GNSS Receiver to measure quickly and acquire the precise position easily. With in-built IMU and adopted self-developed core algorithm, the N3 - SE GNSS Receiver is free of magnetic interference and calibration, and can bring accurate and reliable coordinates. One-time adjustment for successive tilting measurement with centimeter-level accuracy increases work efficiency.

FLEXIBILITY FOR FIELD USE

Featuring full-constellation tracking capability, built-in IMU, WiFi/Bluetooth® connection, and easy survey workflow with Android-based Survey Master Software, the N3 - SE GNSS receiver is one of the most reliable choices for your demanding surveying tasks. Collect more accurate data easier and faster no matter for beginners or professional surveyors. The rugged Al-mg alloy housing with IP67 Dustproof & Waterproof design makes the N3 - SE receiver perfectly and effectively work even in harsh environments.

SMART BATTERY DESIGN

With two 3400mAh hot swap batteries, the N3 - SE GNSS Receiver helps to extend working hours and ensures you fluent workflow in the field. The battery LEDs flash when battery shortage, then you can replace batteries or directly charge in N3 - SE receiver through external power.

N3 - SE GNSS Receiver

N Series GNSS Receiver

Ver.2022.11.30

Signal Tracking

Channels	1198
GPS	L1 C/A, L2C, L2P, L5
BeiDou	B1, B2, B3
BeiDou Global Signal	B1C, B2a
GLONASS	L1 C/A, L1P, L2 C/A, L2P,
Galileo	E1, E5a, E5b, AltBOC
QZSS, IRNSS ¹	
SBAS	WAAS, EGNOS, MSAS, GAGAN,SDCM
L-Band ²	

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

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	1.5m 3D RMS
PPP	10cm Horizontal and 20cm Vertical

Communications

1 Serial port (7 pin Lemo)	Baud rates up to 921,600 bps
Position data output rates: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz	
5 LEDs (indicating Power, Satellite Tracking, GPRS Status and Differential Data)	
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 formats, CMR(GPS only),CMR+(GPS only)
Position data output	ASCII: NMEA-0183 GSV, RMC, HDT, VHD, GGA, GSA, ZDA, VTG, GST; PTNL, PJK; PTNL, AVR; PTNL, GGK ComNav Binary update to 20 Hz

Physical

Size(L × W)	15.5 cm × 7.3 cm
Weight	1.2 kg with two batteries

Environmental

Operating temperature	-40 °C to + 65 °C
Storage temperature	-40 °C to + 85 °C
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	5-27 VDC
Power consumption	2.7 W ³
Li-ion battery capacity	2 ×3400 mAh, up to 24 hours typically
Memory	8 GB ³

Software

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

1. QZSS and IRNSS are reserved for future upgrade.
2. PPP service is optional.
3. 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.