



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/L3, Galileo E1/E5a/E5b/ AltBOC, SBAS, QZSS, IRNSS¹

BeiDou Global Signal B1C, B2a

WiFi/UHF/4G Module

Tilt Compensation

Two 3400 mAh hot swap Batteries

Low Power Consumption

Support PPP and L-Band²

T30 GNSS Receiver

ULTRA-RELIABLE GNSS

SinoGNSS T30 GNSS Receiver is an extremely compact designed receiver, tracking all current GNSS 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 environment.

FLEXIBILITY FOR FIELD USE

Featuring full-constellation tracking capability, tilt compensation, 4G/WiFi/Bluetooth® connection, and easy survey workflow with Android-based Survey Master Software, the T30 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. Its built-in tilt sensor supports maximum 30° pole tilt, and you can check electronic bubble on the controller for fast survey in the field. The rugged Al-mg alloy housing with IP67 Dustproof & Waterproof design makes the T30 perfectly and effectively work even in harsh environments.

SMART BATTERY DESIGN

With two 3400mAh hot swap batteries, the T30 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 T30 through an external power.

T30 GNSS Receiver

T Series GNSS Receiver

Ver.2020.11.30

Signal Tracking

| | |
|--------------------------|------------------------------|
| Channels | 574 |
| 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, L3 |
| Galileo | E1, E5a, E5b, AltBOC |
| QZSS, IRNSS ¹ | |
| SBAS | WAAS, EGNOS, MSAS, GAGAN |
| 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 |
| UHF modem ³ : Tx/Rx with full frequency range from 410-470 MHz ⁴ | Transmit power: 0.5-2 W adjustable Range: 1-5 km ⁵ |
| WiFi/4G modem | |
| 4G Bands: 800/900/1800/2100/2600 MHz | |
| 3G Bands: 900/2100 MHz | |
| 2G Bands: 900/1800 MHz | |
| Support GSM, Point to Point/Points and NTRIP | |
| 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 | |
| Tilt sensor | |

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 | 2.4 W ⁶ |
| Li-ion battery capacity | 2 ×3400 mAh, up to 12 hours typically |
| Memory | 8 GB |

Software

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

1. QZSS and IRNSS are reserved for future upgrade.
2. PPP service is optional.
- 3.UHF modem is default configuration and it can be removed according to your specific needs.
4. Integrated UHF ranges from 410 to 470 MHz with 12.5 KHz channel spacing.
5. Working distance of internal UHF varies in different environments, the maximum distance is 5 Km in ideal situation.
6. Power consumption will increase if transmitting corrections via internal UHF.

Specifications subject to change without notice.