7.5 cm

15.8 cm

Size: 15.8 cm × 7.5 cm
Weight: 0.95 kg with two batteries

T300 Plus
GNSS Receiver

ULTRA-RELIABLE GNSS

SinoGNSS T300 Plus GNSS receiver is an upgrade of the T300. It offers 965 GNSS channels and supports all existing and planned GNSS constellations, providing robust GNSS tracking performance. With the advanced QUANTUMTM Generation III technology, it remarkably improves positioning availability and reliability, so that surveyors are able to expand the reach of their GNSS rovers even in complicated environment.

INTEGRATED AND COMPACT DESIGN

SinoGNSS T300 Plus GNSS receiver combines a GNSS board, Bluetooth® and adjustable TX/RX UHF, WIFI and 4G modem into one rugged device for demanding surveying tasks. Industrial 4G ensures the receiver connects to global mobile network seamlessly. Moreover, T300 Plus built-in tilt IMU supports tilt compensation up to 60° and keeps the accuracy within 2.5 centimeters, which improves your field work with increased efficiency, convenience, and reliability.

FLEXIBILITY FOR FIELD USE

Integrated a full-frequency UHF range from 410 to 470 MHz with 12.5 KHz frequency interval, the T300 Plus is compatible with other radios and flexible for you to select different frequencies. With the built-in TX/RX UHF, it's flexible to choose base or rover. The powerful Radio router function enables T300 Plus to transmit correction data from the base to other rovers, which will expand working ranges in the fields.

SMART BATTERY DESIGN

With two hot swap batteries, the T300 Plus extends working hours and ensures your fluent workflow in the field. The battery LEDs flash when battery runs low. The consumer-grade battery design is compatible with Canon LP-E6, which is easy to purchase and replace in your local market.

Features

Support GPS L1/L2/L5, BeiDou B1/B2/B3, GLONASS L1/L2/L3, Galileo E1/E5a/E5b/E6/AltBOC, QZSS L1/L2/L5, Navic L5, SBAS

Advanced QUANTUM™ Generation III Technology

WIFI/UHF/4G Module

Up to 60° tilt IMU

Smart Battery Design

Low Power Consumption

SinoGNSS®

T300 Plus GNSS Receiver

Signal Tracking

965 channels for simultaneously tracking satellite signals

GPS	L1C/A, L2C, L2P, L5
BeiDou	B1I, B2I, B3I, B1C, B2a, B2b
GLONASS	L1, L2, L3
Galileo	E1, E5a, E5b, E6, AltBOC
QZSS	L1C/A, L1C, L2C, L5
Navic	L5
SBAS	WAAS, EGNOS, MSAS, GAGAN, SDCM, BDSBAS

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

Communications

1 x 7 pin lemo port (Combined Serial and USB function)

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

WIFI: 802.11 a/b/g/n, 2.4Ghz

4G modem[1]
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

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, CMR,CMR+
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(W × H)	Φ 15.8 cm x 7.5 cm
Weight	0.95 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	IP68, protected from temporary immersion to depth of 1 m
Shock	Designed to Survive a 2 m drop onto concrete

Electrical and Memory

Input voltage	7-28 VDC
Power consumption	1.92 W[4]
Li-ion battery capacity	2 × 2000 mAh, up to 14 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. UHF Modem and 4G Modem is default configuration and it can be removed according to your specific needs.

2. Integrated UHF ranges from 410 to 470 MHz with 12.5 KHz channel spacing.

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.