

## 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
  - 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

- PostProcessing (static and fast static)
  - Horizontal: 2.5 mm + 0.5 ppm
  - Vertical: 5 mm + 0.5 ppm
- Long Observations static
  - Horizontal: 3 mm + 0.1 ppm
  - Vertical: 3.5 mm + 0.4 ppm
- Real Time Kinematic
  - Horizontal: 8 mm + 1 ppm
  - Vertical: 15 mm + 1 ppm
- DGPS: <0.4m RMS
- SBAS: 1 m 3D RMS
- Standalone: 1.5 m 3D RMS

## Communications

- 1 x 7 pin lemo port (Combined Serial and USB function)  
Baud rates up to 921600bps for serial
- UHF modem<sup>1</sup>: Tx/Rx with full frequency range from 410-470 MHz<sup>2</sup>
  - Transmit power: 0.5-2 W adjustable
  - Range: 1-5 km<sup>3</sup>
- WIFI/4G modem<sup>1</sup>
  - 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<sup>®</sup>: 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 SC104 Version 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(W × H): Φ 15.8 cm × 7.5 cm
- Weight: 0.95 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: 7-28 VDC
- Power consumption: 1.92 W<sup>4</sup>
- Li-ion battery capacity: 2 × 2000 mAh, up to 10 hours typically
- Memory: 8 GB<sup>5</sup>

## 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 5 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.

© 2021, ComNav Technology Ltd. All rights reserved. **SinoGNSS** is the official trade mark of ComNav Technology Ltd., registered in People's Republic of China, EU, USA and Canada. All other trademarks are the property of their respective owners. (October, 2021).

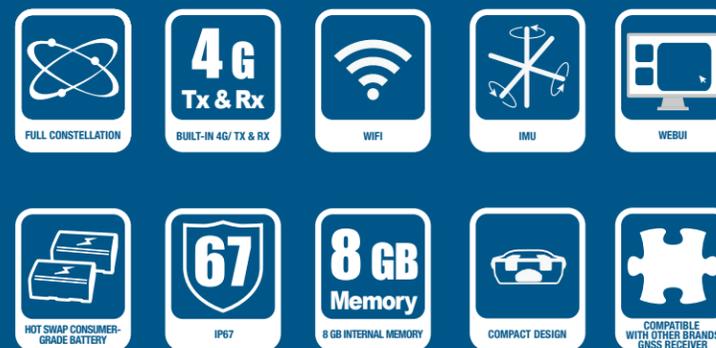
ComNav Technology Ltd.  
Building 2, No. 618 Chengliu Middle Road,  
201801 Shanghai, China

Tel : +86 21 64056796  
Fax: +86 21 54309582

Email: sales@comnavtech.com  
www.comnavtech.com



# T300 Plus GNSS SURVEYING SYSTEM

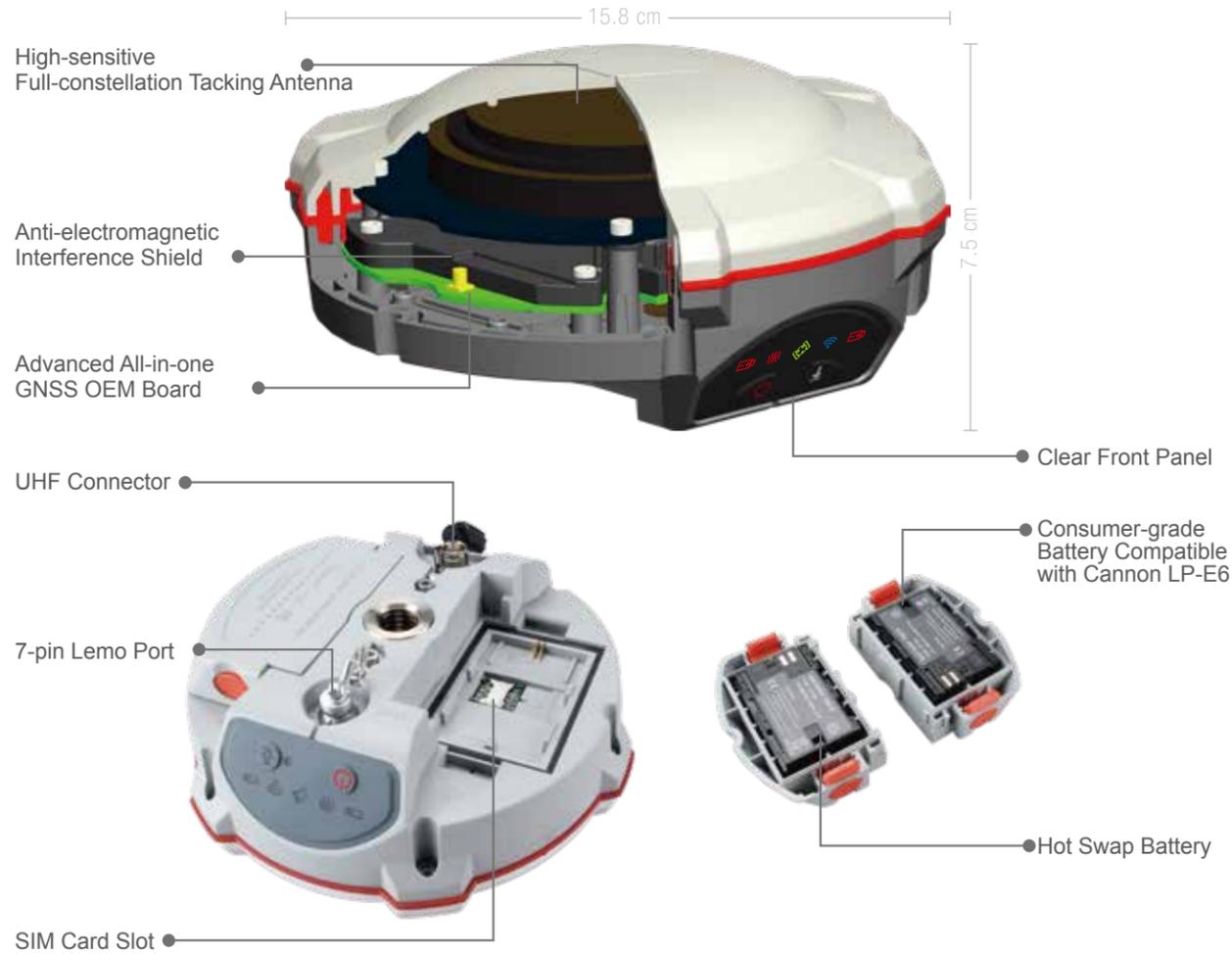


Works with:



Survey Master

Featuring full-constellation tracking capability, built-in IMU, 4G/WiFi connection, 8 GB internal memory and easy survey workflow with Android-based Survey Master Software, the T300 Plus 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.



#### FULL-CONSTELLATION TRACKING

965 channels tracking all working and planned GNSS constellations.



#### ADJUSTABLE TX & RX INTERNAL UHF\*

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



#### HOT SWAP CONSUMER-GRADE BATTERY

Two hot swap batteries ensure you fluent workflow in the field. Consumer-grade battery design, compatible with Cannon LP-E6, makes it easy to be replaced in local markets.



#### SMART-CHARGING DESIGN

Use the T300 Plus as a battery charger so that you can charge the T300 Plus with a 12 VDC adaptor or a car battery.



#### 60° TILT IMU

Up to 60° tilt with 2.5 cm accuracy, providing higher working efficiency in the field.



#### SEAMLESSLY WORK WITH NETWORKING RTK POSITIONING

Its built-in 4G modem ensures the T300 Plus perfectly works with all kinds of CORS worldwide.



#### WiFi CONNECTION

WebUI offers simple configuration, operation, status check of the T300 Plus.



#### USB MODE

When connecting the T300 Plus to your PC, you just copy the logged static data from the receiver to your PC.

\* UHF is removable according to specific regulation in different countries.

## DATA COLLECTOR



### Android R550 ANDROID-BASED RUGGED DATA COLLECTOR

- o Android 8.1 Operating System
- o MIL-STD 810 G and IP67 Certified
- o 5" Sunlight Readable Touch Display
- o 13 MP Camera with Autofocus
- o Compact Design with Long Battery Life
- o Dual SIM and Dual Standby
- o Integrated 4G, Bluetooth® and WiFi



## FIELD SOFTWARE



### Android SURVEY MASTER

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



## POST-PROCESSING SOFTWARE

### SINO GNSS COMPASS SOLUTION SOFTWARE

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

