

Technical Specifications

T300 Plus



Signal Tracking

- 572 channels for simultaneously tracking satellite signals
 - GPS: L1, L2, L2C, L5
 - BeiDou: B1, B2, B3
 - BeiDou Global Signal: B1C, B2a
 - GLONASS: L1, L2
 - Galileo: E1, E5a, E5b
 - QZSS (Reserved)
 - SBAS: WAAS, EGNOS, MSAS, GAGAN

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 modem¹: Tx/Rx with full frequency range from 410-470 MHz²
 - Transmit power: 0.5-2 W adjustable
 - Range: 1-5 km³
- WIFI/4G modem¹
 - 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 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: 3.1 W⁴
- Li-ion battery capacity: 2 × 2000 mAh, up to 9 hours typically
- Memory: 8 GB⁵

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.

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T300 Plus GNSS SURVEYING SYSTEM

FULL CONSTELLATION

BUILT-IN 4G/ TX & RX

WIFI

TILT COMPENSATION

WEBUI

HOT SWAP CONSUMER-GRADE BATTERY

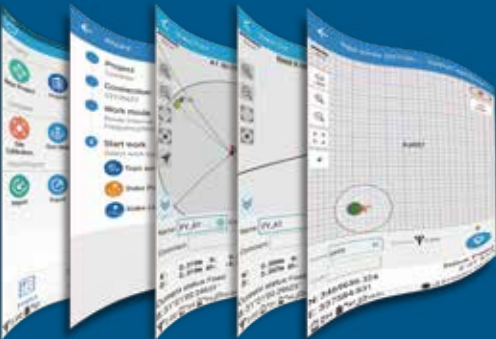
IP67

8 GB INTERNAL MEMORY

COMPACT DESIGN

COMPATIBLE WITH OTHER BRANDS GNSS RECEIVER

Works with:

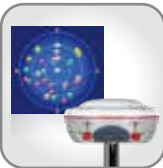
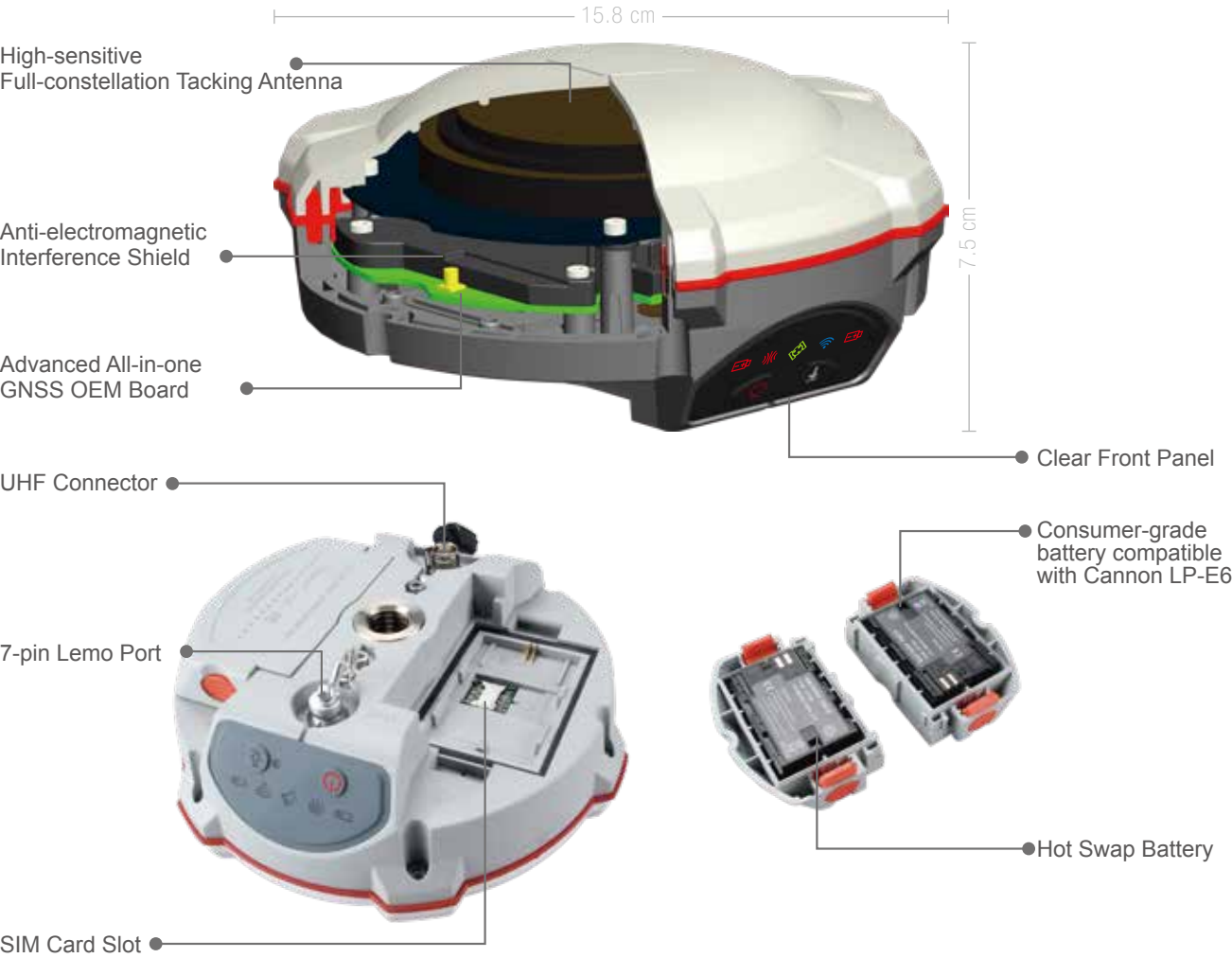


Survey Master

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Featuring full-constellation tracking capability, tilt compensation, 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

572 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.



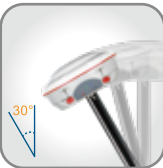
HOT SWAP CONSUMER-GRADE BATTERY

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.



TILT COMPENSATION

Up to 30° tilt compensation allows you to collect high accurate data faster 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



R550 ANDROID-BASED RUGGED DATA COLLECTOR

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



FIELD SOFTWARE



SURVEY MASTER

- Compatible with most of Android devices
- Easier survey workflow via Wizard function
- Support maximum 30° tilt compensation
- Supports all survey modes, including Static, PPK and RTK
- Access to real-time open street maps
- Collect users' feedback through Cloud Service

Windows ▶ Carlson SurvCE Optional ▶ Microsurvey FieldGenius Optional

Google play Survey Master Download for free

POST-PROCESSING SOFTWARE

SINOGNSS COMPASS SOLUTION SOFTWARE

- Provides the complete GPS/GLONASS/BeiDou/GALILEO processing solution
- Supports GNSS observation data in RINEX and ComNav Raw Binary Data formats
- Supports different post-processing in static and kinematic modes
- Outputs analysis reports in various formats (web format, DXF, TXT, KML)

