

## Signal Tracking

- 256 channels with simultaneously tracked satellite signals
- GPS: L1, L2, L2C, L5
- BeiDou: B1, B2, B3
- GLONASS: L1, L2
- Galileo: E1, E5a, E5b
- QZSS (Reserved)
- SBAS: WAAS, EGNOS, MSAS, GAGAN

## Data Format

- Correction data I/O:
  - RTCM 2.X, 3.X, 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, GSK
  - ComNav Binary update to 20 Hz

## Performance Specifications

- Cold start: <50 s
- Warm start: <30 s
- Hot start: <15 s
- Initialization time: <10 s
- Singal re-acquisition: <1.5 s
- Initialization reliability: >99.9%

## 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 and Vibration: MIL-STD-810G Standard; Survive a 2 m drop onto concrete

## Positioning Specifications

Mode	Accuracy
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
E-RTK (<100 km) <sup>1</sup>	0.2m + 1 ppm Horizontal 0.4m + 1 ppm Vertical
DGPS	<0.4 m RMS
SBAS	1 m 3D RMS
Standalone	1.5 m 3D RMS

## Electrical and Memory

- Input voltage: 5-27 VDC
- Power consumption: 3.1 W<sup>5</sup>
- Li-ion battery capacity: 2 × 2000 mAh, up to 9 hours typically
- Memory: 8 GB

## Software

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

## Communications

- 1 Serial port (7 pin Lemo)
- Baud rates up to 921,600 bps
- UHF modem<sup>2</sup>: Tx/Rx with full frequency range from 410-470 MHz<sup>3</sup>
  - Transmit power: 0.5-2 W adjustable
  - Range: 1-5 km<sup>4</sup>
- 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<sup>®</sup>: V 4.0 protocol, compatible with Windows OS and Android OS

1. BeiDou B3 signal is used in RTK calculating engine to enlarge length of baseline, which is only available in Asia Pacific area.
2. UHF modem is default configuration and it can be removed according to your specific needs.
3. Integrated UHF ranges from 410 to 470 MHz with 12.5 KHz channel spacing.
4. Working distance of internal UHF is varies in different environments, the maximum distance is 5 Km in ideal situation.
5. Power consumption will increase if transmitting corrections via internal UHF.

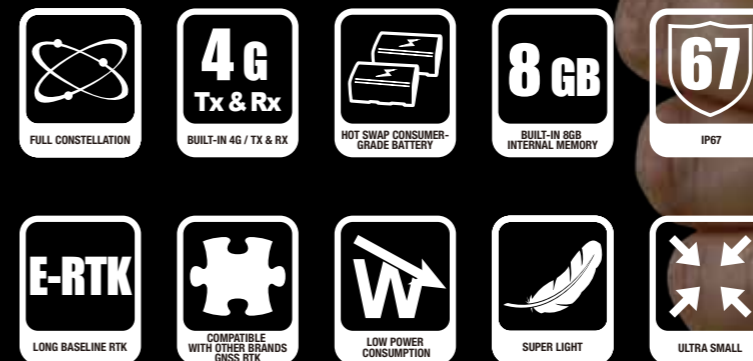
Specifications subject to change without notice.

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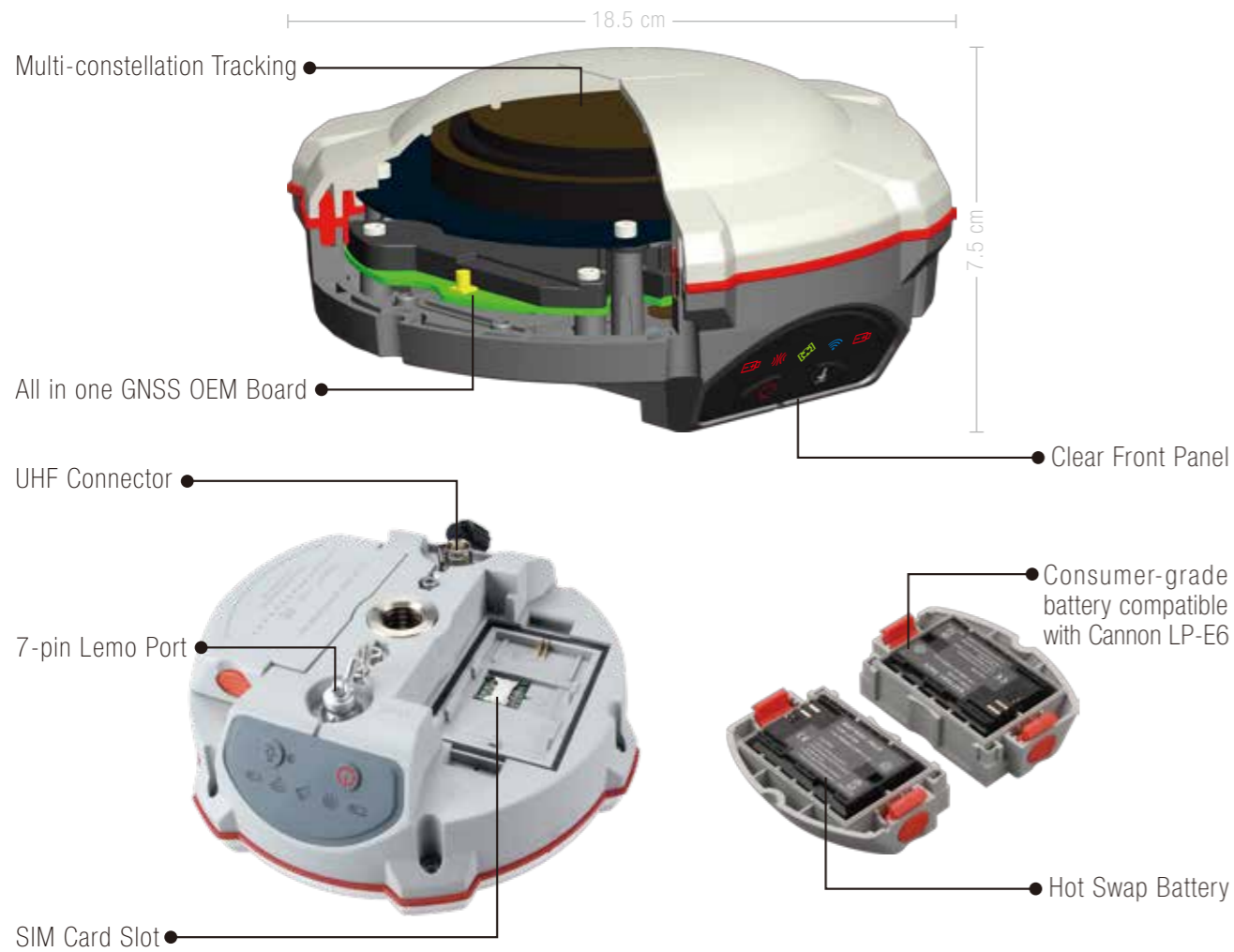
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# T300 GNSS SURVEYING SYSTEM



With SinoGNSS Quantum™ algorithm and fully integrated design, the compact sized T300 GNSS receiver is one of the most reliable choices for any surveying tasks. Strong signal tracking ability, hot swap battery and rugged housing design make the T300 perfectly and effectively work even in harsh environments.



**SINGLE & MULTI-CONSTELLATION COMPUTING**

256 channels tracking all working constellations and each constellation can work independently



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

0 – 2 Watt internal UHF allows you more convenient and effective field work rather than external radio



**SEAMLESSLY WORK WITH NETWORKING RTK POSITIONING**

Built-in GPRS/GSM/4G module ensure the T300 perfectly work in all kinds of CORS



**HOT SWAP AND CONSUMER-GRADE BATTERY**

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



**USB MODE**

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



**RUGGED LIGHTWEIGHT AND SMALL VOLUME DESIGN**

IP67 Dust/Water proof design and survive a 2m drop onto the concrete. Small volume with less than 1kg weight makes the T300 is one of portable GNSS receivers meets your RTK surveying demands

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

**DATA COLLECTOR**

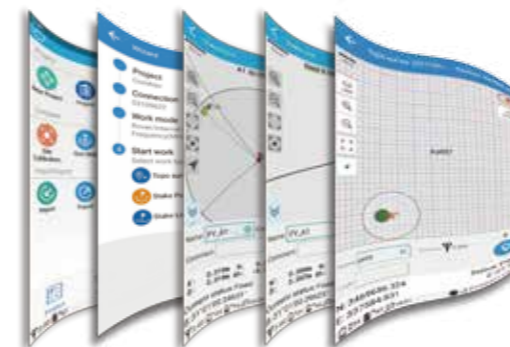


**R500 ANDROID-BASED RUGGED DATA COLLECTOR**

- Android 6.0 Operating System
- IP68 Certified
- 4.3" Sunlight Readable Touch Display
- 8 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
- Supports all survey modes, including Static, PPK and RTK
- Access to real-time open street maps
- Collect users' feedback through Cloud Service



**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)

