

SPECIFICATIONS

| Satellite Signals Tracked Simultaneously | |
|--|---|
| Signal Tracking | 1598 channels GPS: L1,L1C,L2,L2C,L2P,L5 GLO: L1,L2,G1,G2,G3 BDS: BDS-2: B1I,B2I,BDS-3: B3I,B3I,B1C,B2a,B2b* GAL: E1,E5A,E5B,E6C,AltBOC* QZSS: L1,L2C,L5* SBAS: L1* IRNSS: L5* L-Band (Available in 2022 in Asian-Pacific region) |
| GNSS Features | Positioning output rate: 1Hz~50Hz Initialization time: <8s Initialization reliability: >99.99% |
| Positioning Precision | |
| High-Precision GNSS Positioning | Horizontal: ±2.5mm+0.1ppm Vertical: ±3.5mm+0.4ppm SBAS positioning accuracy: typically<50cm RMS |
| Static GNSS Surveying | Horizontal: ±2.5mm+0.5ppm Vertical: ±5mm+0.5ppm |
| Real-Time Kinematic Surveying | Horizontal: ±8mm+0.5ppm Vertical: ±15mm+0.5ppm |
| Network RTK | Horizontal: ±8mm+0.5ppm Vertical: ±15mm+0.5ppm |
| User Interaction | |
| Operating System | Linux |
| Buttons | One buttons operation |
| Indicators | Four indicate lights |
| Web UI | Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB |
| Voice Guide | iVoice intelligent voice technology provides status and voice guide Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define |
| Secondary Development | Providing secondary development package |
| Hardware Performance | |
| Dimension | 135mm(Diameter)x84.75mm(Height) |
| Weight | 0.97kg (battery included) |
| Material | Magnesium aluminum alloy shell |
| Operating | -40°C~+65°C |
| Storage | -55°C~+85°C |
| Humidity | 100% Non-condensing |
| Waterproof/Dustproof | IP68 standard, protected from long time immersion to depth of 1m IP68 standard, fully protected against blowing dust |
| Shock And Vibration | Withstand 2 meters pole drop onto the cement ground naturally |
| Power Supply | 9-28V DC, overvoltage protection |
| Battery | Internal Li-on,6800mAh,3.7V |
| Battery Life | Static mode 15h, Rover mode 12h,Base mode 12h |
| Communications | |
| I/O Port | 5PIN LEMO external power port+RS232, 7PIN external USB(OTG)+Ethernet, Type C port 1 radio antenna interface |
| UHF Wireless Modem | 2W radio, receive and transmit,typically 8km with Farlink protocol Radio repeater |
| Frequency Range | 410-470MHz |
| Communication Protocol | Farlink, Trimtalk450s, SOUTH, HUACE, Hi-target, Satel |
| Cellular Mobile Network | Standard function. WCDMA/CDMA2000/TDD-LTE/FDD-LTE 4G network modem, downward compatible with 3G GPRS/EDGE |
| Double Module Bluetooth | BLEBluetooth 4.0 standard, support for android, ios cellphone connection Bluetooth 2.1+EDR standard |
| NFC Communication | Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed) |
| Data Collector Internet | Support to obtain the differential info from CORS station via internet of the controller itself, no need to insert SIM card and network antenna for GNSS receiver. With better compatibility, faster access speed. |
| WIFI | |
| Standard | 802.11 b/g standard |
| WIFI Hotspot | The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and monitor receiver |
| WIFI Data Link | To work as the datalink that receiver is able to broadcast and receive differential data via WIFI |
| Data Storage/ Transmission | |
| Data Storage | 8GB SSD internal storage, Support 128Gb external OTG storage Support external USB storage and automatical cycle storage,RINEX direct Changeable record interval, up to 50Hz raw data collection |
| Data Transmission | USB data transmission, supporting FTP/HTTP data download |
| Data Format | Differential data format: RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 GPS output data format: NMEA 0183, PJK plane coordinates, Binary code Network model support: VRS, FKP, MAC, fully support NTRIP protocol |
| Inertial Sensing System | |
| Tilt Angle | Up to 60 degrees |
| Accuracy | Down to 2cm |
| Thermometer | Built-in thermometer sensors, adopting intelligent temperature control technology which can monitor and adjust the temperature of receiver in real time |

SANDING
EVERY POINT MATTERS

T7

— Brand new diminutive RTK receiver —



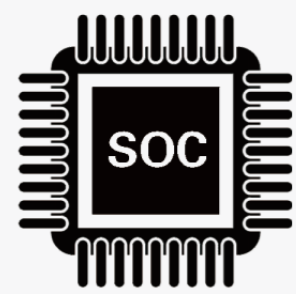
SANDING
EVERY POINT MATTERS

SANDING OPTIC-ELECTRICS INSTRUMENT CO., LTD.
Add: Geomatics Industry Park, No. 39 Si Cheng Road, TianHe District, Guangzhou 510663 P.R. China
Tel: +86-20-23380888 Fax: +86-20-22139032
E-mail: export@sandinginstrument.com

| | | | |
|--------------------|------|-------------------|---------------|
| Linux OS | WIFI | WEB UI | HD Voice |
| All Constellations | IMU | Electronic Bubble | IP68 |
| 8GB SSD Storage | OTG | NFC | Bluetooth 4.0 |



Outstanding GNSS Performance >>>



Equipped with new generation the most powerful GNSS RTK engine with 1598 channels, T7 can track signal from all constellations including B3 signal of BDS satellites. Its high-performance GNSS antenna is upgraded with strong anti-interference ability and sensitive satellite signal capture ability, to track more satellite in harsh environments. system is much higher, it can be adapt to the job of longer uninterrupted power.

Long Range Radio Link >>>

Built-in transceiver integrated radio, working frequency 410-470MHz. TrimTalk450S, TrimMark3, SOUTH, CHC, SATEL, HI-TARGET are all compatible. Equipped with Far-Link "Simultaneous" radio module, based on Farlink protocol, it can increase the sensitivity and efficiency of radio signal, achieve the typical working range as 8KM operation, and meet the needs of customers for small and medium-scale.



"SOC", New System Structure >>>

"SOC" means "System-on-Chip", this new design integrates several individual hardware modules into one microchip. The receiver can be much lighter and smaller, system runs more stable and faster, bluetooth connection speed is faster. The "High-Low Frequency Integration" antenna can effectively restrain the interruptive signal.



Barrier-Free Measurement >>>

Built-in 6800mAh high-capacity battery, the battery life is more than 10 hours, one charge, meets all-day work. Equipped with fast charging charger, which can be fully charged within 5 hours. The battery core can be recharged with long life, and performance is more secure and reliable.



Innovative Design >>>

Single button boot design, one button evokes all RTK operations. The body screen adopts a translucent high-strength panel, which has a stronger visual sense of technology. Plus four indicator lights, common information is clear at a glance. Double speaker design, three-dimensional sound broadcast, remove noise barriers, and receive clearer sound.

IMU Survey >>>

Built-in IMU compensator, correct the coordinates according to the tilt direction and angle of the centering rod automatically within 60°, assist you quickly and accurately survey or stake out points without leveling the pole, error less than 3cm within 45° inclination, improve working efficiency by 20%.

