

SPECIFICATIONS

Satellite Signals Tracked Simultaneously		
Signal tracking	965 channels	
	GPS: L1, L1C, L2C, L2P, L5, L2, L1 C/A, L2 C/A, L2E	
	GLO: G1, G2, G3, L1 C/A, L2 C/A, L1P, L2P, L3	
	BDS: BDS-2: B1I, B2I, B3I BDS-3: B1I, B3I, B1C, B2a, B2b*	
	GAL: E1, E5A, E5B, E6C, AltBOC*	
	QZSS: L1, L2C, L5*, L1 C/A, L1S, L1C, L6*	
	SBAS: L1*	
	IRNSS: L5*	
	MSS L-Band (Reserve):<40cm	
GNSS features	Positioning output rate:1Hz~50Hz	
	Initialization time:<10s	
	Initialization reliability:>99.99%	
Positioning precision		
Code differential GNSS positioning	Horizontal: ±0.25m+1ppm	Vertical: ±0.50m+1ppm SBAS positioning accuracy: Typically<5m 3DRMS
Precision Static	Horizontal: ±2.5mm+0.1ppm	Vertical: ±3.5mm+0.4ppm
Static and Fast Static	Horizontal: ±3mm+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
IMU tilt compensation	Additional horizontal pole tip uncertainty typically less than 10mm + 0.7 mm/° tilt down to 30°	
IMU tilt angle	0°~60°	
User interaction		
Operating system	Linux	
Buttons	Double buttons operation	
Indicators	4 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	166mm x 96.1mm	
Weight	1.3KG	
Material	Magnesium aluminum alloy shell	
Operating	-45°C~+70°C	
Storage	-55°C~+85°C	
Humidity	100% Non-condensing	
Waterproof/Dustproof	IP68 standard, protected from long time immersion to depth of 1m, fully protected against blowing dust	
Vibration	MIL-STD-810F	
Shock	Withstand 2 meters pole drop onto the cement ground naturally	
Power Supply	9-28V DC, overvoltage protection	
Battery	10000mAh, 7.4V	
Battery life	Static mode 16h, Rover RTK mode 15h, Base UHF mode 10h	
Communications		
I/O port	5PIN LEMO external power port + RS232, Type-C Fast-charge + Copy static data	
Cellular Mobile Network	Advance 4G network communic. module and compatible 3G/2G	
Wireless modem	Built-in radio, 1W/2W/3W switchable, typically work range can be 15KM with Farlink	
	Radio and internet repeater switchable	
Frequency Range	410-470MHz	
Communication Protocol	Farlink, Trimtalk450s, SOUTH, HUACE, Hi-target, SateI	
Double Module Bluetooth	BLE Bluetooth 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)	
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 external USB storage and automatical cycle storage	
	Changeable record interval, up to 50Hz raw data collection	
Data Transmission	USB data transmission, supporting FTP/HTTP data download	
Data Format	Differential data format: CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2	
	GPS output data format: NMEA 0183, PIK plane coordinates, Binary code, Trimble G50F	
	Network model support: VRS, FKP, MAC, fully support NTRIP protocol	
Inertial sensing system		
Tilt survey	Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle of the centering rod	
Electronic bubble	Controller software display electronic bubble, checking leveling status of the centering rod real time	
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

T9 pro

A High Performance and Innovative
Surveying GNSS Solution



- World-leading Position Technology, All Constellations Supported
- Inertial Measurement + GNSS Positioning, More Accurate and Faster
- Up to 60° Tilt Angle, More Convenient to Measure in Difficult Terrain
- HD 1.3-inch Color LCD Screen, More Suitable for Field Work
- 10,000 mAh battery, A Whole-day Working With only One Recharge

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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

T9 pro

A High Performance and Innovative Surveying GNSS Solution



Outstanding GNSS performance

Equipped with new generation the most powerful GNSS RTK engine with 965 channels, T9Pro 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.

Inertial Measurement, a technology that greatly improves efficiency.

The latest inertial measurement technology is onboard with T9Pro. The tilt survey is no more affected by the earth's magnetic field and requires no correction. It can be activated and start working within only few seconds. With a maximum tilt angle of 60°, there is no need for centering, this fast positioning will increase measurement speed by over 30%. The combination algorithm of IMU + GNSS can get fixed solution faster and keep measurement results more stable.

Farlink protocol, Improved Functions and Higher Performance

Adopts an internal radio with 3W maximum transmission power to achieve the typical working range as 15km through "Far-link" protocol. The transmission bandwidth becomes large, which perfectly solves the problem of large data volume of multiple constellations transmission. And the power consumption can reduce about 60% in the same amount of data transmission compare to the traditional RTK.

Other Features



10,000 mAh Battery, A whole-day working With only one recharge

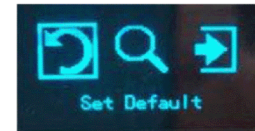
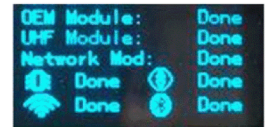
10,000 mAh battery, a whole-day working With only one recharge. Support fast-charge. Adopt Type-C interface design, which be fully charged within 3.5 hours. 6-28V DC supply voltage with overvoltage protection. And T9Pro supports battery pole supply mode, increasing extra working time 5 hours.



Increase Your Efficiency with 10 Innovative Designs!

Make your workflow simpler and Smoother

- Quickly switch working mode & data link, without handheld controller and mobile phone.
- Quickly check system information on receiver screen, no need of other device.
- Quickly launch PPK measurement program, without handheld controller.
- Precisely display self-check status on receiver screen, save time, never miss information.



Make you work easier and comfortable

- Re-designed self-check program, only one press to activate it.
- Two steps to restore factory default setting, operation in WebUI is not needed.
- Menu display and voice guide in 8 languages, no problem to work in foreign countries.

Make you working result more reliable

- Newly designed GNSS / Network / wifi / BT all-in-one antenna, enhances signal strength and stability.
- Static data recording status, data size, time can be viewed on screen in real time, to prevent data loss and rework.
- PPK data recording status can be viewed on screen, to prevent data loss and rework.



Recommended Partners

SurvX Field Software

- Android software SurvX
- Easy-to-use work flow
- Useful survey tools
- Google map supported
- DXF, DWG import & display
- Advanced roading, surfacing, slope staking.
- Multi-language is available



H5 Data Collector

- Android 8.1 OS, 4.3 inch touch screen, google service is fully usable.
- Octa-core 2.0GHz CPU, 3GB RAM, 8+32GB storage memory, ensures a smooth operation.
- Full character keyboard speeds up your data input.
- 1300MP Auto focus camera for a high quality image data capture.
- 4G network communication, reliable data transmission.
- P67 water/ dust proof, built to work in challenging environment. Light weight but high strength alloy body, 2m drop shock resistance.

