

SPECIFICATIONS

Satellite Signals Tracked Simultaneously	
Signal tracking	965 channels
	GPS: L1, L1C, L2C, L2P, L5
	GLO: G1, G2, G3
	BDS: BDS-2: B1I, B2I, B3I BDS-3: B1I, B3I, B1C, B2a, B2b*
	GAL: E1, E5A, E5B, E6C, AltBOC*
	QZSS: L1, L2C, L5*
	SBAS: L1*
	IRNSS: L5*
	MSS L-Band (Reserve)
GNSS features	Positioning output rate:1Hz~20Hz
	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
Static GNSS surveying	Horizontal: ±2.5mm+0.5ppm Vertical: ±5mm+0.5ppm
Real-time kinematic surveying	Horizontal: ±8mm+1ppm Vertical: ±15mm+1ppm
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	One button 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	-45°C~+70°C
Storag	-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	9-25V DC, overvoltage protection
Battery	Internal Li-on, 6800mAh, 3.7V
Battery life	Static mode 10 h, Rover mode 8h,Base mode 8h
Communications	
I/O port	5PIN LEMO external power port + RS232, 7PIN external USB(OTG)+Ethernet
	1 radio antenna interface
Wireless modem	Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM
	Radio repeater
Frequency Range	410-470MHz
Communication Protocol	Farlink, Trintalk450s, SOUTH, HUACE, Hi-target, Satel
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)
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 moditor 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, PJK plane coordinates, Binary code, Trimble GSOF
	Network model support: VRS, FKP, MAC, fully support NTRIP protocol
Inertial sensing system	
Tilt survey(Optional)	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 thermomter sensors, adopting intelligent temperature control technology which can monitor and adjust the temperature of receiver in real time



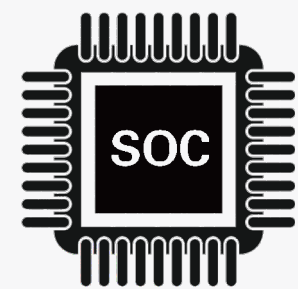
T7 GNSS Receiver

— Brand new diminutive RTK receiver —



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Linux OS	WIFI	WEB UI	HD Ivoice
All Constellations	IMU (Optional)	Eletronic Bubble	IP68
8GB SSD storage	OTG	NFC	Bluetooth 4.0

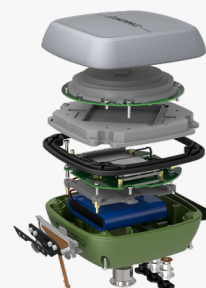


Outstanding GNSS performance >>>

Equipped with new generation the most powerful GNSS RTK engine with 965 channels,T7 can track signal from all consatellations 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.

Ultimate portability >>>

Highly integrated GNSS antenna, Bluetooth module and WIFI module, leading the design trend of miniaturization, light weight, and portable RTK to a new height.Magnesium alloy housing, tough line design, more delicate surface decoration, stronger sense of technological design, more durable.



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.

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 .



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.

IMU survey(Optional) >>>

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%.

