

GNSS Receiver
T5Lite
Economical handheld RTK

T5Lite GNSS Receiver

T5Lite is a mini portable multifunctional GNSS receiver, a new generation of measurement engine supporting tilt measurement, built-in 4G Modem, Bluetooth and WIFI. It adopts a new appearance design, magnesium alloy structure and Linux operating system. It is an economical and portable geodesic GNSS receiver.

CHARACTERISTIC

Linux Intelligent System

ARM Cortex-A7 + Linux, the intelligent system platform, brings efficient computing and unlimited expansion of product functions to users.

Multi Constellation

With its 1408 channels, T5Lite provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BDS, GALILEO, QZSS, SBAS and IRNSS) are included.

Tilt Measurement

T5Lite has the IMU module. Fast initialization and up to 60° inclination.

Combined Antenna

The new four in one antenna integrates GNSS, WIFI, Bluetooth and 4G, with smaller volume and better signal.

4G Modem

T5Lite has an internal 4G Modem that operates with more cellular network signals, a fast internet connection is guaranteed.

Long Endurance

Built in high-capacity lithium battery ensures continuous working time of more than 16 hours under normal operation.

IP65 Design

Industrial design, solid magnesium alloy shell, in line with IP65 design requirements, safe and reliable.

T5Lite GNSS Receiver

Economical handheld RTK

main body Magnesium alloy
ABS/PC top cover

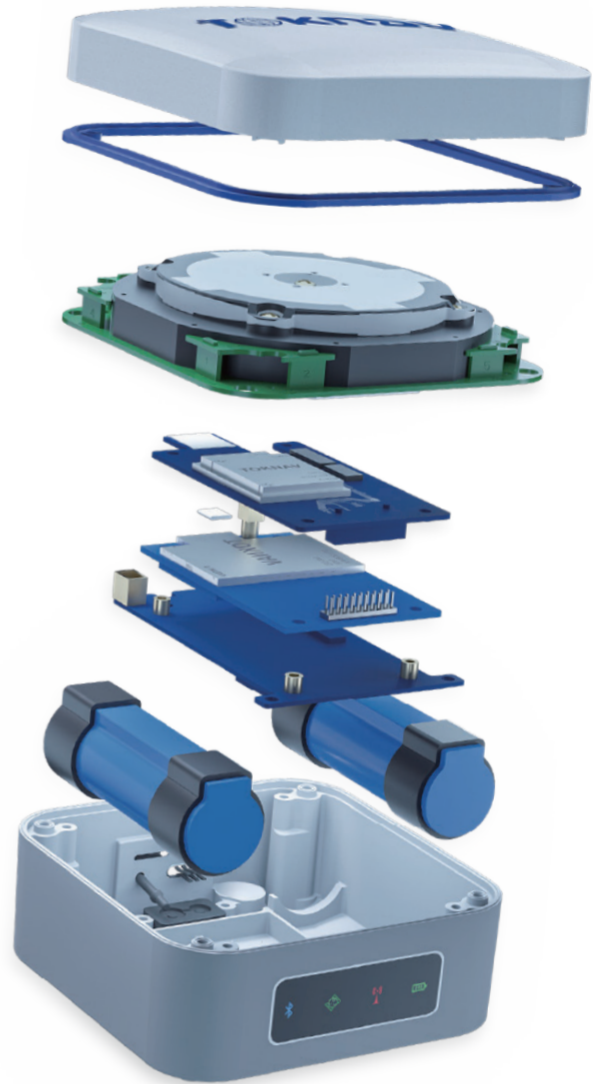
1408 Channel
GPS GLONASS BDS GALILEO
QZSS SBAS

32GB
storage

3.7V, 9600mAh
Over 16 Hours

Portable and smart
Weight 600g

IMU60 supported
Fast initialization



Economical handheld



HEIGHT	DIAMETER	WEIGHT
69mm	100.5mm	600g

10cm mini size, weighing only 600g.

Measure at will with IMU60

A 9600mAh battery, with a runtime of up to 16 hours.

SPECIFICATION

SYSTEM

HARDWARE SYSTEM ARM Cortex-A7 1.8GHz

OS Linux

GNSS

GPS L1C/A, L1C, L2P(Y), L2C, L5

GLONASS L1, L2, L3

BDS B1I, B2I, B3I, B1C, B2a, B2b(PPP)

GALILEO E1, E5a, E5b, E6(PPP)

OZSS L1, L2, L5

SBAS L1(PPP)

NavIC (IRNSS) L5*(IRNSS support in future)

Channel 1408

Standard Output NMEA-0183

Correction I/O Protocol RTCM 3.X

Frequency 5Hz(max)

Reacquisition Time <1s

Cold Start Time <40s

ACCURACY

SINGLE (RMS) Horizontal: 1.5m / Vertical: 2.5m

DGPS (RMS) Horizontal: 0.4m / Vertical: 0.8m

RTK (RMS) Horizontal: $\pm (8\text{mm}+1\text{ppm})$
Vertical: $\pm (15\text{mm}+1\text{ppm})$

Timing Precision (RMS) 20ns

Static Mode Precision (RMS) Horizontal: $\pm (2.5\text{mm}+1\text{ppm})$
Vertical: $\pm (5\text{mm}+1\text{ppm})$

Velocity Estimation (RMS) 0.03m/s

Tilt Correction (Within 60°) <2cm

SYSTEM PLATFORM

Bluetooth BR+EDR+BLE

WIFI 802.11 b/g/n

Network LTE FDD: B1/2/3/5/8
LTE TDD: B38/39/40/41
GSM: 900/1800MHz

Storage 32GB Storage

INDICATOR

Bluetooth Indicator Show Bluetooth status

Satellite Indicator Show position status

Data link Indicator Show differential signal status

Power Indicator Show power status

BATTERY

Battery 3.7V, 9600mAh

Work time More than 16 hours
(Typical, Rover, GSM)
The static working mode supports continuous data collection for 24 hours

Charge MTK PE+1.1/2.0 9V/2A
USB PD 12V/1.25A 5V/3A
(Support fast charging adapter and adaptively and dynamically adjust charging current)

ENVIRONMENT

Work Temperature -20°C~+60°C

Storage Temperature -40°C~+85°C

Shock Resistance Can withstand a 1.5m drop at normal temperatures

Protection Rating IP65

PHYSICAL

Materials Magnesium alloy main body, ABS/PC top cover

Dimensions 100.5mm*100.5mm*69mm

Weight 600g

ACCESSORIES

T5Lite Device 1 SET

USB power adapter 1 PCS

USB A To Type-C 1 PCS

CERTIFICATION

Regulatory Compliance CE, NGS
CE

www.toknav.cn info@toknav.cn

Manufacturers may update parameters at any time, please refer to the latest product information.



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