



GNSS Receiver

T10Pro

Engineering-level Standard RTK

T10Pro GNSS Receiver

T10Pro is a latest portable multifunctional GNSS receiver, a new generation of measurement engine, supporting tilt measurement, NFC, built-in 4G Modem, Bluetooth and WIFI. It adopts a new appearance design, magnesium alloy structure and Linux operating system. It is an extremely light-weight, fully functional 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, T10Pro 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

T10Pro 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

T10Pro 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.

IP68 Design

Industrial design, solid magnesium alloy shell, in line with IP68 design requirements, safe and reliable.

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Four-in-one
microwave antenna

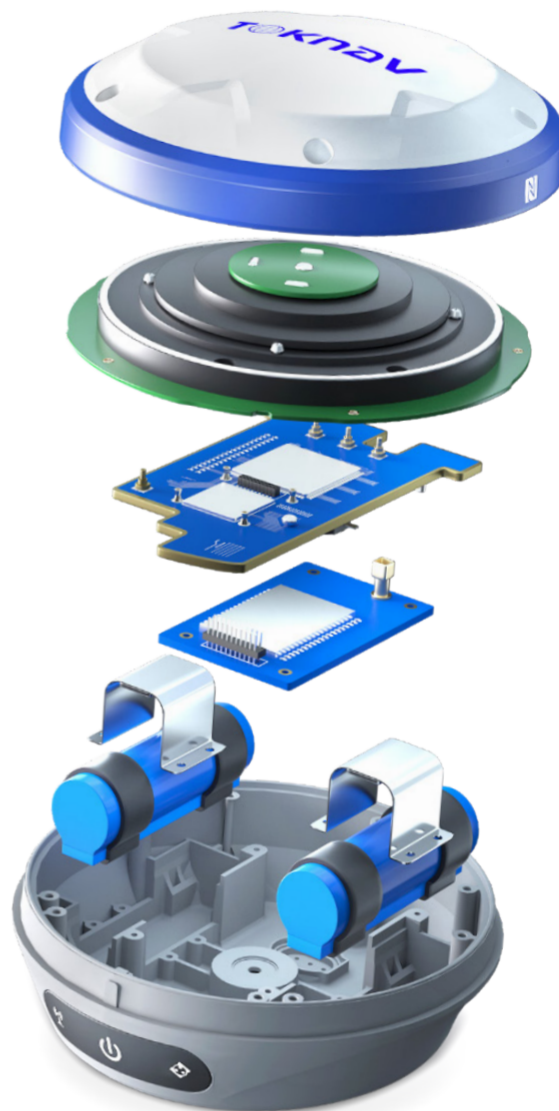
1408 Channel
GPS GLONASS BDS GALILEO
QZSS SBAS

Intelligent voice
promption

3.7V, 9600mAh
Over 16 Hours

Complete certification
NGS, CE, FCC, KC

IMU60 supported
Fast initialization



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HEIGHT	DIAMETER	WEIGHT
68mm	147.9mm	740g

The 5th generation IMU technology
With IP68 protection, it's resilient in harsh environments.
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)

QZSS L1, L2, L5

SBAS L1(PPP)

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

Channel 1408

Standard Output NMEA-0183

Correction I/O Protocol RTCM 2.X, RTCM3.X

Frequency 5Hz(Typ) 20Hz(max)

Reacquisition Time <1s

Cold Start Time <30s

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: $\pm (2.5\text{mm}+0.5\text{ppm})$
Vertical: $\pm (5\text{mm}+0.5\text{ppm})$

Velocity Estimation (RMS) 0.03m/s

Tilt Correction (Within 60°) $\leq 2\text{cm}$

SYSTEM PLATFORM

Bluetooth BR+EDR+BLE

WIFI 802.11 b/g/n

Network LTE FDD: B1/2/3/4/5/7/8/12/13/
18/19/20/25/26/28
LTE TDD: B38/39/40/41
WCDMA: B1/2/4/5/6/8/19
GSM: B2/3/5/8

Storage 32GB Storage

Data Radio

Frequency: 410~470MHz
Protocol: TRIMTALK, TRIMMK3,
SOUTH, TRANSEOT
RF transmit power: 0.5W/1.5W
Air baud rate: 9600 / 19200bps

INDICATOR

Power Indicator Show power status

Satellite Indicator Show position status

Data link Indicator Show differential signal 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 $-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$

Storage Temperature $-40^{\circ}\text{C}\sim+85^{\circ}\text{C}$

Shock Resistance Can withstand a 1.5m drop at
normal temperatures

Protection Rating IP68

PHYSICAL

Materials Magnesium alloy main body,
ABS/PC top cover

Dimensions $\Phi 147.9\text{mm}\times 68\text{mm}$

Weight 740g

ACCESSORIES




T10Pro Device 1 SET

USB power adapter 1 PCS

USB A To Type-C 1 PCS

Radio Antenna 1 PCS

CERTIFICATION

Regulatory Compliance NGS, CE, FCC, KC




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



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