



# *GNSS Receiver* **T20Pro**

Multifunctional Intelligent RTK

# T20Pro GNSS Receiver

T20Pro is a high-performance GNSS receiver that provides an easy-to-use solution for users. TOKNAV T20Pro supports the original tilt compensating GNSS solution. Multi constellation and frequency tracking always guarantee a fixed solution for your job. LCD display screen can make your operation faster and easier. T20Pro built-in 5W radio allows users to have a longer working distance, up to 16km in open areas, The durable IP68 design makes it possible to work in extreme environments.

## 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, T20Pro provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BDS, GALILEO, QZSS and SBAS) are included.

### Adjustable Power

T20Pro has internal radio of adjustable power of 1W/2W/5W, and works as base station at 5W power. The transmission distance can reach to maximum 16km when working in the open area.

### Combined Antenna

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

### 4G Modem

T20Pro 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 18 hours under normal operation.

# T20Pro GNSS Receiver

## Multifunctional Intelligent RTK

Main body magnesium alloy  
ABS/PC top cover

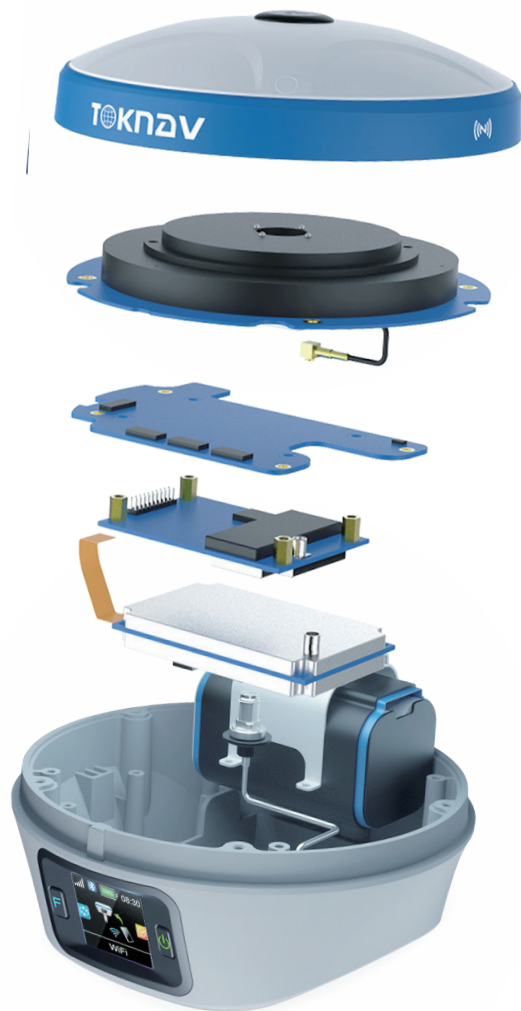
**1408 Channel**  
GPS GLONASS BDS GALILEO  
QZSS SBAS

Adjustable power  
of 1W/2W/5W

**7.4V, 6500mAh**  
More than 18 Hours  
(Typical, Rover, GSM)

Comprehensive network coverage  
Compatible with global network

The 5th generation  
IMU technology



HEIGHT	DIAMETER	WEIGHT
90.7 mm	143.5mm	900g

5W Radio, transmission distance up to 16km  
LCD display



# SPECIFICATION

## SYSTEM

HARDWARE SYSTEM ARM Cortex-A7 1.8GHz

OS Linux

## GNSS

GPS L1 C/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(Requires firmware support)

Channel 1408

Standard Output NMEA-0183

Correction I/O Protocol RTCM 3.X

Frequency 20Hz(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:  $\pm (2.5\text{mm}+0.5\text{ppm})$   
Vertical:  $\pm (5\text{mm}+0.5\text{ppm})$

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: B1/2/3/4/5/7/8/12/13/  
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

Radio Frequency: 410~470MHz  
Protocols: TRIMTALK, TRIMMK3,  
SOUTH, TRANSEOT

Radio RF transmit power: 1W/2W/5W  
Air Baud Rate: 9600, 19200bps

Storage 32GB storage

## DISPLAY

LCD Screen size: 1.3inch  
Display mode: TFT  
Display format: 240\*RGB\*240  
View Angle: FULL

## BATTERY

Battery 7.4V, 6500mAh

Work time More than 18 hours (Typical,  
Rover, GSM)  
The static working mode  
supports continuous data  
collection for 26 hours

Charge USB PD 15V/2A  
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 Withstand a 1.5m pole drop

Protection IP68

## PHYSICAL

Materials Magnesium alloy casing with  
ABS/PC plastic top cover

Dimensions  $\Phi 143.5 * 90.7\text{mm}$

Weight 900g

## ACCESSORIES

T20Pro 1 Unit

USB power adapter 1 PCS

Type-C To Type-C 1 PCS

Radio Antenna 1 PCS

## CERTIFICATION

Regulatory Compliance NGS, CE, FCC  


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



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