

# Discover unsurpassed technology and quality with the Champion TKO GNSS Rover

## Champion TKO™ GNSS Rover

*Scalable for future use as a Base/Rover*

### The Champion TKO GNSS Rover

The Champion TKO is a fully integrated GNSS rover kit with a GPRS modem and is available to you at a cost less than most brands. Built around the world's most advanced technology, the TKO is engineered for the real world. With full IP67 protection and rubberized bumper for worry free drop protection, the TKO will last for years to come.

### Teaming technology

By pairing the industry's most advanced GNSS board capable of tracking all signals from all satellites in range, the Champion TKO GNSS rover delivers unmatched power, accuracy and performance.

### Industry support

The TKO GNSS rover kit is compatible with all types of software and comes standard with the popular MicroSurvey FieldGenius software. Upgrade to Carlson SurvCE software also available.

### Accessories

The Champion TKO rover kit comes with everything needed for remote RTK operation.

TKO Rover kit includes:

- GNSS Rover
- Scepter data collector & bracket
- MicroSurvey FieldGenius (other software available)
- Pacific Crest DB970 GNSS 220 channel OEM board
- Heavy duty carrying case
- Carbon fiber rover rod
- Multiport wall charger
- Batteries



**\$9,995** MSRP

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# Champion TKO™ Rover

## Receiver Accuracy

Static/Fast Static: Horizontal: 2.5 mm + 1 ppm; Vertical: 5 mm + 1 ppm

RTK Accuracy: Horizontal: 1 cm + 1 ppm; Vertical: 2 cm + 1 ppm

## Physical Features

- ARM9 CPU with 64M flash memory
- Size: 7.68in diameter; Height: 4.09in;
- Weight: 3.8lbs (Including Li-ion battery)

## Electrical Power

- Battery: 2 Internal Lithium batteries with 4400 mAh each
- Voltage: 7.4 V
- Single battery working continuously: 15 hours in static mode, 12 hours in GPRS mode and 8 hours in 2 W transmitting power
- 6~36V external DC power

## Environment

- IP Standard: IP67
- Waterproof/Dustproof: Protected from temporary immersion to depth of 2 meters and completely dust-proof
- Anti-impact: Protected from 2 meters
- Operation temperature: -45°C to 65°C (-49°F to -85°F)
- Storage temperature: -55°C to 85°C (-13°F to 140°F)
- Humidity: 100% non-condensing

## Communication Ports

- 2 RS-232 serial ports
- 1 USB port
- 1 port for Bluetooth communication
- 2 port for external DC power supply (multiplex)
- 1 SIM card slot for GSM
- 1 built-in communication module port

## Function Key and LED

- 3 Panel buttons: 1 power switch key, 2 functional keys
- 3 LEDs: 1 Satellite LED (single color), 1 Communication LED (dual color), 1 Power LED (dual color)

## Intelligent Voice Module

- Broadcast function for operations and status checks

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## GNSS Positioning Features

- Pacific Crest DB970 GNSS 220 channel OEM board
- Multiple high precision correlator for GNSS pseudorange measurements
- Low noise GNSS carrier phase: Accuracy <1mm within 1 Hz wide band
- Unprecedented low elevation-angle tracking technology
- Initialization time <10 Secs
- Initialization reliability > 99.9%
- 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20Hz and 50 Hz output (default 10Hz)
- Default configuration includes 3G/GPRS modem, 1 watt UHF transceiver
- TNC connector for both 3G and UHF modems
- Differential data format: CMR, CMR+, RTCM 2.1, 2.2, 2.3, 3.0, 3.1
- Navigation Output Format: ASCII: NMEA-0183 GSV, AVR, RMC, HDT, VGK, VHD, ROT, GSK, GGA, GSA, ZDA, VTG, GSTPJT, PJK, BPQ, GLL, GRS, GBS Binary System: Trimble GSOF
- Signals tracked simultaneously: GPS: L1 C/A, L2E, L2C, L5 GLONASS: L1 C/A, L1 P, L2, C/A (only for GLONASS M) and L2P SBAS: L1 C/A, L5 GIOVE-A & GIOVE-B: L1 BOC, E5A, E5B and E5Alt BOC (optional) GALILEO & Compass: (upgrade)



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