

## GNSS Rover



- Integrated RTK GNSS receiver
- Large 5.7" VGA Color Touchscreen
- Fast 806MHz processor
- 3.2MP Camera
- 3.5G Cellular module
- Built-in *Bluetooth*<sup>®</sup> and WiFi connectivity

# Topcon Tesla RTK GNSS Rover

The Topcon Tesla RTK is the largest screen, single-handed, handheld controller on the market that can also be utilized as a network RTK rover. This is the best controller to maximize the MAGNET Field user experience.

Using touchscreen technology, the Topcon Tesla RTK features direct touch access to all graphic controls. This 5.7" display is the main selling feature while the Windows® Mobile 6.5.3 OS provides a modern operating environment and added expandability with other application software. With graphical icon functionality, the Topcon Tesla RTK allows for quick and easy operation. The fast 806MHz processor drives any Topcon field application software with ease.

With the addition of a built-in 3.2MP camera, 3.5G cellular modem and *Bluetooth*® / WiFi ability, the Tesla RTK is an essential addition to any surveyor's arsenal. Both *Bluetooth*® and WiFi are standard features of the new Tesla RTK eliminating the need for expensive upgrades. The Tesla RTK has dual hot-swappable batteries capable of up to 16 hours of operation. Additional accessories such as a dashboard mount and external battery charger are available to fit your needs.



## Large 5.7" Color Screen

- 5.7" VGA color touchscreen
- Better visibility of controls
- No-glare screen, even in sunlight
- On-screen keyboard



## Weather Sealed USB Ports

- Quickly and easily copy and upload files
- Rugged protection
- Waterproof ports
- Rubber covers keep the ports clean



## Precision Antenna Connection

- Precise GNSS antenna port
- Rugged, waterproof connector
- Easy connect/disconnect
- Can be retrofitted to any Tesla Geo3G



## 3.2MP Built-in Camera

- Autofocus
- 4GB of flash storage
- Store hundreds of photos
- Use a common USB memory stick to offload images

## Internal GPS Antenna

The internal antenna option provides navigational grade GPS functionality that is capable of 2-5m accuracy. This can be used with MAGNET Field for general mapping. Network RTK functionality requires an external GNSS antenna.



## External Precision Antenna

The Tesla RTK has a precision antenna port that can be connected to an external PG-S1 antenna on top of a pole. This combination provides the most precise and useful method of measurement.



## PRIMARY FEATURES



### Waterproof and Rugged

The Tesla RTK is rated at IP67, which means it can be submersed in water and still function. The unit also can be dropped from 4 ft. (1.2m) and still operate. The reliability of this device in the field is unsurpassed.



### KIT COMPONENTS

#### System Components

- Li-Ion battery
- Hand strap
- USB download cable
- Stylus
- 100-240VAC power supply
- Screen protector
- Case



## SPECIFICATIONS

### GNSS

GNSS Receiver	GPS + GLONASS
Number of Channels	72 GPS + GLONASS L1/L2
WAAS/EGNOS	Yes
L1, L2 Static	H: RMS 3mm + 0.8ppm V: RMS 4mm + 1.0ppm
RTK Accuracy	H: 10mm + 1.0ppm V: 15mm + 1.0ppm

### Computer

CPU	806 MHz PXA320 Processor
OS	Microsoft® Windows Mobile® 6.5.3 Professional Multiple languages
Memory	256MB RAM, 4GB flash storage SD/SDHC slot, user accessible
Display	5.7" (145mm) color VGA LCD (640 x 480) Portrait or landscape orientation
Keypad	15 control buttons (6 user assignable) Five-way directional navigational keypad Adjustable LED backlit keys
Camera	3.2MP resolution with autofocus

### Wireless Connectivity Options

Bluetooth® / WiFi	2.0 + EDR, Class 1 / 802.11b/g
GSM	Penta-band 3.5G GSM/GPRS/ EDGE/HSDPA 850/900/ 1800/1900/2100 MHz

### Environmental

Dust/Water Protection	IP67
Operating Temperature	-22°F to 140°F (-30°C to 60°C)
MIL-STD-810G	Drop 4 ft. (1.2m), Vibration, Humidity; Tumble spec: 1,000 1.6 ft/0.5m tumbles (2,000 drops)
Dimensions	5.3" W x 8.6" L x 2" D (136mm x 220mm x 51mm)
Operating Time	Up to 16 hours In full RTK: Up to 6 hours

For more specification information:  
[www.topconpositioning.com/tesla-rtk](http://www.topconpositioning.com/tesla-rtk)

## SOFTWARE

# MAGNET™

A family of software solutions that streamlines the workflow for surveyors, contractors, engineers and mapping professionals.

## Field

### Modern User Interface

MAGNET Field on-board provides a bright, graphical user interface with large icons, and bright readable text. The screens not only look good, but provide fast workflows.



### Easy to Use

The icon and text field interface has been optimized to provide both text and images to indicate what data is needed on each screen. Shortcut buttons and fast access tabs provide a very productive interface.



### Advanced Calculations

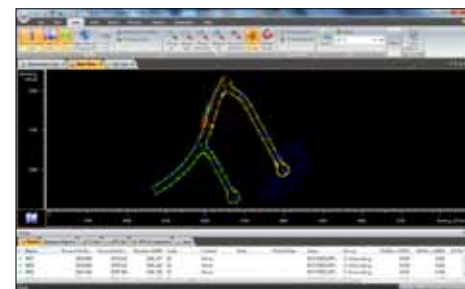
MAGNET Field not only controls the measurements of the instrument but also provides many COGO and adjustment calculations.



## Office Tools

### MAGNET Office Tools

Directly integrates into Autodesk® products utilizing their CAD engine, or as a standalone installation with Topcon's CAD engine. Either way, connect to MAGNET Enterprise directly from your CAD software.



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