

## Robotic Total Stations



- Advanced security and maintenance with new TSshield™
- PowerTrac™ tracking
- Ultra-powerful advanced EDM
- Exclusive LongLink™ communications
- Advanced angle accuracy
- Rugged, waterproof design

# PS Series Robotic Total Stations

## Advanced Design with Superior Technology

The PS is a professional grade robotic total station. This new advanced design provides an onboard data collection interface, exclusive LongLink™ communication, and an incredibly powerful EDM.

You can work directly on the bright, color touchscreen or with the alpha-numeric keyboard, to achieve higher levels of production with MAGNET™ Field onboard software. The PS total station can be used on a wide variety of applications. From building layout to earthwork volumes, and land surveying or control of your machines on site, the PS is the productive choice.

## A World's First! New TSshield™

Topcon is proud to offer another World's First technology in all PS Series total stations – TSshield™. Every instrument is equipped with a telematics-based multi-function communications module providing the ultimate security and maintenance capabilities for your investment.

If your activated instrument is lost or stolen, you can send a coded signal to the instrument and disable it. This feature secures your total station anywhere in the world!

In the same module you have daily connectivity to cloud-based Topcon servers that can inform you of available software updates and firmware enhancements.



The exclusive LongLink™ communications functionality in every PS Series model provides operational capabilities never before offered in a robotic total station. With a 600m wireless communication range, you can now operate the field controller from the "smart-spot" of the crew, the prism pole. Topcon's new LongLink™ technology brings a whole new level of flexibility to your manual field crew.



## Ultra-Powerful, Advanced EDM

- 1,000m non-prism range
- 6,000m prism range
- Less than 1- second fine measurement
- Coaxial red laser pointer
- Pinpoint, precise beamspot



## Easy Access USB 2.0 Memory

- Up to 8GB storage
- Environmentally protected
- Compatible with industry standard USB memory stick



## Advanced Angle Accuracy

- Self-calibration
- Proven high accuracy technology
- Angle encoder "Best-in-Class"



## Rugged, Waterproof Design

- Waterproof/Dustproof IP65 design handles the toughest environments
- Magnesium-alloy housing providing stable angle accuracy
- Graphic display and alphanumeric keyboard (standard)



## PRIMARY FEATURES



### PowerTrac™ Tracking Technology

The revolutionary PowerTrac™ engine dramatically increases power for prism tracking. Employing entirely new optics, laser system, and further advanced algorithms, PowerTrac™ provides the PS Series with unsurpassed ability to keep tracking a moving prism even under the toughest environmental conditions.



## KIT COMPONENTS

### System Components

- PS Total Station
- Batteries (2) and Charger
- Lens Cap and Hood
- Tool Kit
- Quick Guide
- Digital Manual
- Carry Case with Straps



## SPECIFICATIONS

### Telescope

Resolving power	2.5"
Magnification	30x

### Angle Measurement

	Min. Resolution/Accuracy
PS-101	1"
PS-103	3"

### Tilt Angle Compensation

Compensation	Dual-axis compensator
Range	±6'

### Distance Measurement

Prism EDM Range	6,000m
Prism EDM Accuracy	1.5mm+2ppm
Non-Prism Range	1,000m
Non-Prism Accuracy	2mm+2ppm (0.3-200m)
Measuring Time	Fine: 0.9 sec Rapid: 0.6 sec Tracking: 0.4 sec

### Communications

LongLink™ rover communications\*  
 USB 2.0 Slot (Host + Slave)  
 RS-232C Serial

### General

Display	Color Touch TFT 240 x 320 QVGA Display (Dual Display)
Keyboard	25 keys with illuminator (Single Keyboard)
Battery Operation	Up to 4 hours
Dust/Water Protection	IP65
Wireless Connection	Bluetooth® Class 1
Operating Temperature	-20°C to +50°C (-4°F to +122°F)

\* The communication range may vary due to the condition of the area

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

## SOFTWARE

# MAGNET™

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

## Field

### Modern User Interface

MAGNET Field provides a bright, graphical user interface with large touch 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 on-board not only controls the measurements of the PS, but also provides many COGO and adjustment calculations right on the instrument. Stay on-board to complete your work.



## Office Tools

### MAGNET Office Tools

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



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