

## On-board Total Stations



- Advanced Security and Maintenance with New TSshield™
- MAGNET Field On-board
- Exclusive LongLink™ Communications Functionality
- Fast and Powerful EDM
- Advanced Angle Accuracy

# OS Series On-board Total Stations

## Topcon's new OS Series Total Stations – New Advanced Design with Superior Technology

The OS is a professional grade compact total station. This new advanced design provides an on-board data collection interface, exclusive LongLink™ communication, and an incredibly powerful EDM.

Work directly on the bright, color touchscreen, or with the alpha-numeric keyboard, to achieve higher levels of production with MAGNET Field on-board software. The OS total station can be used on a wide variety of applications. From building layout to earthwork volumes, and land surveying, the OS is the productive choice.

### On-board Windows® Touchscreen

Running on-board software on the Windows® touchscreen computer increases productivity. The screen is large and bright, so the user can see more software functions and intuitively interact with the screen where needed. Software applications become easier to use and there is no need to hold a field controller in one hand while turning the instrument with the other. The OS has precise tangent locks to keep the angle positions accurate even with touchscreen and keyboard interaction.

Projects move faster by being able to do point collection, description entry, and on-screen calculations. The bright colorful screen provides enough resolution to view points, lines and icons, to help you make faster decisions. All of your data is stored in one spot, safely on-board.

### A World's First! New TSshield™

Topcon is proud to offer another World's First technology in all OS 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 – your total station is secure 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.



### Easy Access USB 2.0 Memory

- Up to 8GB storage
- Environmentally protected
- Compatible with industry standard thumb drives



### Ultra-Powerful, Advanced EDM

- 500m non-prism range
- 4000m prism range
- Red/Green Guidelight
- Coaxial red laser pointer
- Pinpoint, precise beamspot



### Advanced Angle Encoder System

- "Best in Class" 1" angle accuracy available
- Incorporates exclusive IACS (Independent Angle Calibration System) on 1" & 2" models
- Self-calibration
- Proven High Accuracy Technology



### EDM Trigger Key

- Perfect touch location
- Promotes angle stability
- No torque when measuring on-board
- Water/Dust proof
- Easy for gloved hands



### Automatic Updates

Automatic on-screen alerts of available firmware updates.

### Lock/Unlock Theft Deterrent

Advanced security and theft deterrent with remote Lock and Unlock function accessible from TSshield™ on-line.

## PRIMARY FEATURES



### Exclusive LongLink™

For stakeout and other operations where being at the prism pole with a field controller is critical, Topcon's exclusive LongLink™ functionality allows you to operate a field controller more than 300m away from the instrument. LongLink™ brings you flexibility you've never had before.



## KIT COMPONENTS

### Complete System Components

- OS Total Station
- Battery and Charger
- Lens Cap and Hood
- Tool Kit
- Digital Manual on USB
- Quick Guide
- Carry Case and Carry Straps



## SPECIFICATIONS

### Angle Measurement

	Min. Resolution/Accuracy
OS-101	0.5"/1"
OS-102	1"/2"
OS-103	1"/3"
OS-105 (Single Display)	1"/5"
IACS (Independent Angle Calibration System)	Standard on 1" & 2" models
Compensation	Dual-axis compensator

### Distance Measurement

Prism EDM Range	4000m
Prism EDM Accuracy	2mm+2ppm
Non-Prism Range	500m
Non-Prism Accuracy	3mm+2ppm (0.3-200m)
Measuring Time	Fine: 0.9 sec
	Rapid: 0.7 sec
	Tracking: 0.3 sec

### Communications

LongLink™ rover communications utilizing Bluetooth® Class 1  
 USB 2.0 Slot (Host + Slave)  
 RS-232C Serial

### General

Display/Keyboard	Dual LCD Touchscreen (OS-105 Single Display)
Battery Operation	Up to 18 hours
Dust/Water Protection	IP65
Wireless Connection	Bluetooth® Class 1
Operating Range	-30°C to +60°C* *Special Arctic and Desert versions available

For more specification information:  
[www.topconpositioning.com/os-series](http://www.topconpositioning.com/os-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 on-board provide 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

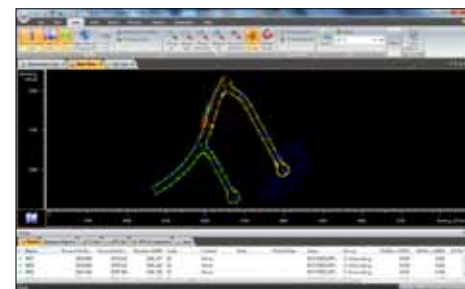
MAGNET Field on-board not only controls the measurements of the OS, but also provides many COGO and adjustment calculations right on the instrument. Stay on-board to complete your work.



## Office Tools

### MAGNET Office Tools

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



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