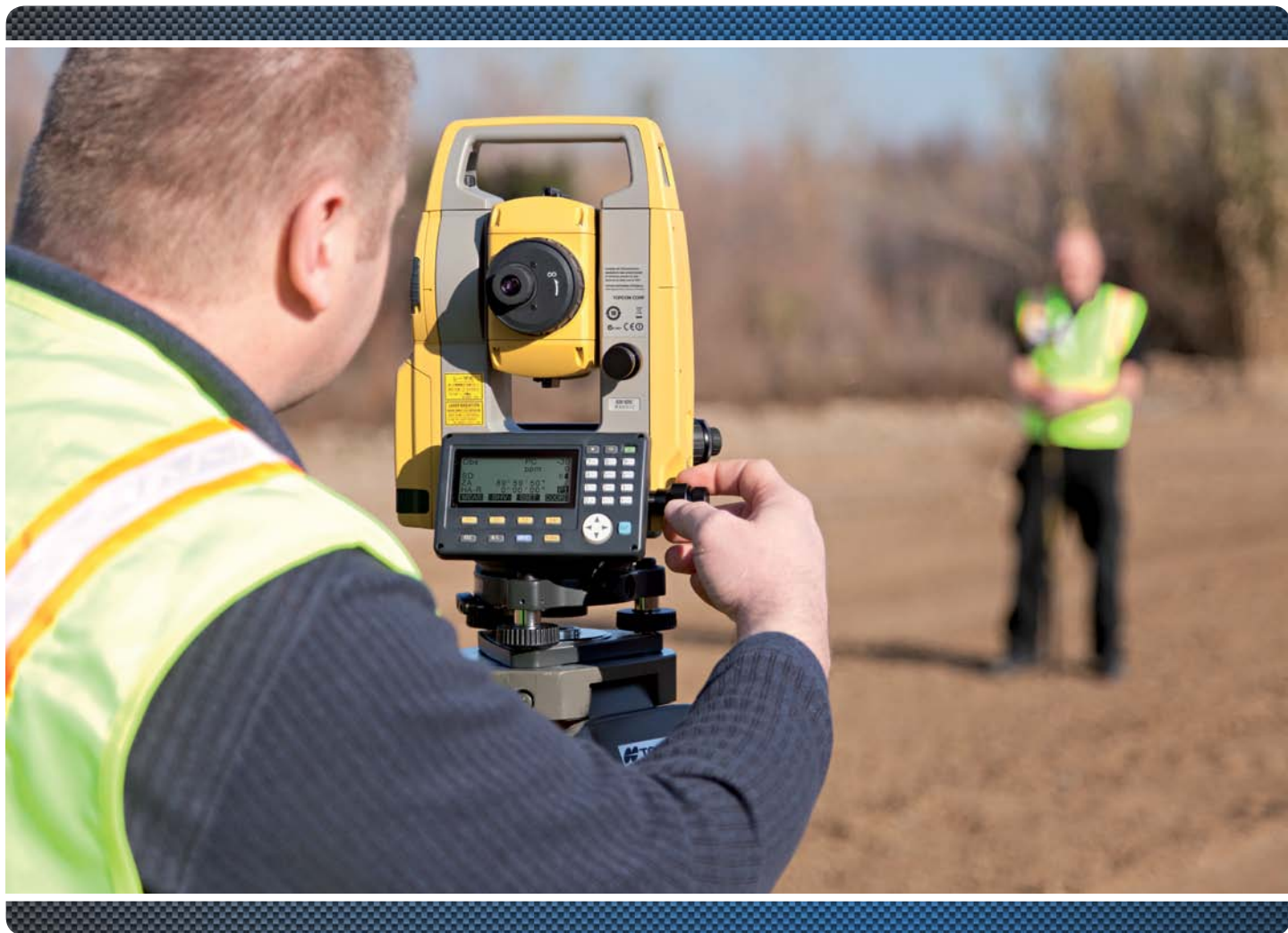


## Reflectorless Total Stations



### Superior Technology

- Advanced Security & Maintenance with New TSshield™
- Fast and Powerful EDM
- Exclusive LongLink™ Communications Functionality
- Advanced Angle Accuracy
- Super Long Battery Life – 36 Hours!
- Rugged, Waterproof Design

**Topcon's new ES Series Total Stations –  
New Advanced Design with Superior Technology**

The new ES Series was designed from the ground up to deliver the very latest technology advantages, all in a small, sleek design – you'll appreciate the advantages from the very first measurement.

Featuring a class leading EDM unit, the ES is able to measure up to 4,000 m to standard prisms, and can measure in reflectorless mode up to 500 m at an incredible 3 mm + 2 ppm accuracy.

Measurements are carried out faster than ever, and at 15 mm (over 30 m), the bright red laser dot pinpoint features with ease.

**A World's First! New TSshield™**

Topcon is proud to offer another World's First technology in all ES Series total stations – TSshield™. Every instrument is equipped with a telematics-based multifunction 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! And, in the same module, you have daily connectivity to cloud-based Topcon technical personnel that can inform you of available software updates and firmware enhancements.



- **Ultra-Powerful, Advanced EDM**
  - 500 m non-prism range
  - 4000 m prism range
  - Less than 1 second fine measurement



- **Rugged, Waterproof Design**
  - Waterproof/Dustproof IP66 design handles the toughest environments
  - Magnesium-alloy housing providing stable angle accuracy



- **Advanced Angle Encoder System**
  - “Best in Class” 1” angle accuracy available
  - Incorporates exclusive IACS (Intelligent Automatic Calibration System) on 1” & 2” models



- **Easy Access USB 2.0 Memory**
  - Up to 8 MB storage
  - Environmentally protected
  - Compatible with industry standard accessories and cables

The exclusive LongLink™ communications functionality in every ES Series model provides operational capabilities never before offered in a manual total station.

With a 300m range wireless communication using Bluetooth Class 1 technology, now you can operate the data collector from the “smart-spot” of the crew, the prism pole. Also referred to the two-man, economical robot solution, the new Topcon LongLink™ technology brings a whole new level of capability to your manual field crew.



## Primary Features

The Topcon ES Series total stations are combining modern design and advanced technology.



### On-board Software

The new ES Series offers an intuitive graphical on-board software that provides advanced measurement and calculation functionality without an external data collector.



### PACKAGE

● **Completely system components:**

- ES Total Station
- Power Supply
- USB Cable
- USB Stick



**SPECIFICATIONS**

**Angle Measurement**

	Min. Resolution/Accuracy
ES-101	0.5"/1"
ES-102	1"/2"
ES-103	1"/3"
ES-105	1"/5"
ES-107	1"/7"

IACS (Independent Angle Calibration System)  
Standard on 1" & 2" models

Compensation Dual-axis compensation

**Distance Measurement**

Prism EDM Range	4000 m (ES-107 3000m)
Prism EDM Accuracy	2 mm + 2 ppm
Non-Prism Accuracy	3 mm + 2 ppm (0.3 - 200 m)
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)

**General**

Display/Keyboard	Dual Graphic Backlit LCD
Protection	IP66
Operating Range	-30C to +60C



For more information:  
[www.topcon.com](http://www.topcon.com)

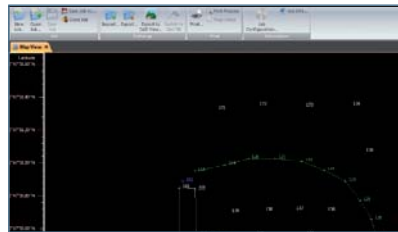
**MAGNET Solutions**

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



**MAGNET Field**

Cloud connected field controller software for use with total stations and GPS rovers. With ES LongLink™ communication, the field controller can be operated, with the prism, at the point of measurement.



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**MAGNET Office**

Connect to the MAGNET cloud directly from your CAD software. Office is full-featured CAD and processing software, or use MAGNET through direct integration in Autodesk products.

**MAGNET Enterprise**

See every set of data and stay connected with both Field and Office with this cloud managed interface. Unprecedented productivity can be yours with Enterprise.

**Topcon Total Care™ Maintenance Contracts**

At Topcon we understand the importance of customer care, we realise that without assistance you may not be able to maximise the benefits of your investment.

That's why we offer additional maintenance and support options over and above the standard manufacturers warranty to provide you with peace of mind that you will have a trouble free relationship with your equipment or software over the years to come.

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