



# ES SERIES

REFLECTORLESS  
TOTAL STATIONS





## Reflectorless Total Stations

- Advanced security and maintenance with TSshield™
- Fast and powerful EDM
- Exclusive LongLink™ communications
- Advanced angle accuracy
- Super long battery life – 36 hours
- Rugged, waterproof design

### Advanced design with superior technology

The ES Series was designed from the ground up to deliver the very latest technological 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.

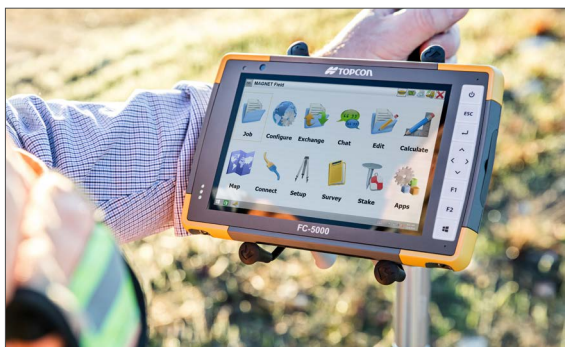
Measurements are captured faster than ever, and with a beam width of 15 mm (over 30 m), the bright red laser dot pinpoints features with ease.

### A world's first – TSshield™

Topcon is proud to offer another world's first technology in ES Series total stations – TSshield™. Instruments are equipped with a telematics-based multi-function communications module providing the ultimate security and maintenance capabilities for your investment.

If the activated instrument is lost or stolen, send a coded signal to the instrument and disable it – the 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.



### LongLink™

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





**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 Standard on 1" and 2" models

Compensation Dual-axis compensator

**Distance Measurement**Prism EDM Range 4,000 m  
(ES-107 3,000 m)

Prism EDM Accuracy 2 mm + 2 ppm

Non-Prism Range 500 m

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)

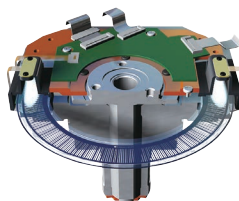
RS-232C Serial

**General**Display Dual Backlit LCD  
(ES-107 Single Display)

Battery Operation Up to 36 hours

Dust/Water Rating IP66

Wireless Connection Bluetooth® Class 1

Operating Temp -20°C to 60°C\*  
\* Special Arctic version  
available (-30 to 50°C)**Ultra-powerful, advanced EDM**

- 500 m non-prism range
- 4,000 m prism range
- Red/Green guidelight
- Coaxial red laser pointer
- Pinpoint, precise beamspot

**Easy access USB 2.0 memory**

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

**Advanced angle encoder system**

- "Best in Class" 1" angle accuracy
- Incorporates exclusive IACS (Independent Angle Calibration System) on 1" and 2" models

**Rugged, waterproof design**

- Waterproof/dustproof IP66 design handles the toughest environments
- Magnesium-alloy housing providing stable angle accuracy
- Graphic display and alphanumeric key board (standard)



For more information:  
[topconpositioning.com/es-series](http://topconpositioning.com/es-series)

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