

Reflectorless Total Stations



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

ES Series Reflectorless Total Stations

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 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 4,000m to standard prisms, and can measure in reflectorless mode up to 500m at an incredible 3mm + 2ppm accuracy.

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



Ultra-Powerful, Advanced EDM

- 500m non-prism range
- 4000m 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 thumb drives



Advanced Angle Encoder System

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



Rugged, Waterproof Design

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



The exclusive LongLink™ communications functionality in every ES Series model provides operational capabilities never before offered in a manual total station. With a 300m wireless communication range, using *Bluetooth*® Class 1 technology, 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 new LongLink™ technology brings a whole new level of flexibility to your manual field crew.



PRIMARY FEATURES



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



KIT COMPONENTS

Complete System Components

- ES Total Station
- Battery and Charger
- Lens Cap and Hood
- Tool Kit
- USB stick with digital manual
- Quick Guide
- Carry Case and Carry Straps



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 compensator

Distance Measurement

Prism EDM Range	4000m (ES-107 3000m)
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 (ES-107 Single Display)
Battery Operation	Up to 36 hours
Dust/Water Protection	IP66
Wireless Connection	Bluetooth® Class 1
Operating Range	-20°C to +60°C*
	*Special Arctic version available (-30 to +50°C)

For more specification information:
topconpositioning.com/es-series

OPTIONAL SOFTWARE

MAGNET™

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.



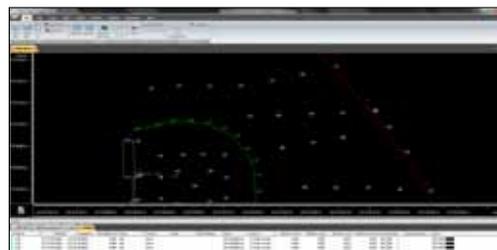
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MAGNET Enterprise

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.

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.



7400 National Drive • Livermore • CA 94550
 (925) 245-8300

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