ES Series



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 telematicsbased 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

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

LONGLINK

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 World's First - TSshield™ system 300m range LongLink[™] functionality Easy access, environmentally protected USB 2.0 slot 500m non-prism range Highly visible Green & Red LED guidelights Unique IACS angle encoder system (1" & 2") Super long battery life -13 PKI 6/74,33 M(8138) 6/38,35 A(3636) 6/48,36 A(3636) up to 36 hours Quick & easy-to-use trigger button Exclusive "STAR-KEY" functionality Tangent Lock – Securely Electronic leveling holds your angle in place system Dual, graphic, backlit LCD display Laser plummet & keyboard

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

ES Series



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)		

FIISHI EDIVI Kalige	4000III (E3-107 5000III)
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
	UCD 2.0 Clat (Last , Claus)

- USB 2.0 Slot (Host + Slave)
- RS-232C Serial

General

Display/Keyboard

 Battery Operation
 Up to 36 hours

 Dust/Water Protection
 IP66

 Wireless Connection
 Bluetooth® Class 1

 Operating Range
 -30 c + 60C*

Dual Graphic Backlit LCD (ES-107 Single Display) Up to 36 hours IP66 *Bluetooth*[®] Class 1 -30C to +60C* *Special Arctic and Desert versions available



For more specifications information: topcon-positioning.eu/es-station



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OPTIONAL SOFTWARE

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 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.



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