**ES Series**

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Angle Measurement</th>
<th>Min. Resolution/Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES-101</td>
<td>0.5&quot;/1&quot;</td>
</tr>
<tr>
<td>ES-102</td>
<td>1&quot;</td>
</tr>
<tr>
<td>ES-105</td>
<td>1.5&quot;</td>
</tr>
<tr>
<td>ES-105</td>
<td>2&quot;</td>
</tr>
<tr>
<td>ES-107</td>
<td>2.5&quot;</td>
</tr>
</tbody>
</table>

WCS (Independent Angle Calibration System)

| Compensation       | Dual-winkel compensator |

<table>
<thead>
<tr>
<th>Distance Measurement</th>
<th>Prism</th>
<th>Non-Prism</th>
<th>Prism</th>
<th>Non-Prism</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDM Range</td>
<td>4000m</td>
<td>3000m</td>
<td>2000m</td>
<td>3000m</td>
</tr>
<tr>
<td>Accuracy</td>
<td>2mm+2ppm</td>
<td>2mm+2ppm</td>
<td>2mm+2ppm</td>
<td>2mm+2ppm</td>
</tr>
</tbody>
</table>

**Communications**

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

**General**

<table>
<thead>
<tr>
<th>Display/Keyboard</th>
<th>Dual, Graphic, Backlit LCD (ES-107: Single)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Operation</td>
<td>Up to 36 hours</td>
</tr>
<tr>
<td>Dust/Water Protection</td>
<td>-35°C to +60°C*</td>
</tr>
<tr>
<td>Wireless Connection</td>
<td>Bluetooth® Class 1</td>
</tr>
<tr>
<td>Operating Range</td>
<td>-35°C to +60°C*</td>
</tr>
</tbody>
</table>

*special arctic version

**To watch a video on the ES, follow this QR code link:**

![QR Code](QR_code.png)

For more specification information:

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

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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 MAGNET Field controller can be operated, with the prism, at the point of measurement.

**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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**Reflectorless Total Stations**

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

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**Your local Authorized Topcon dealer is:**

[7400 National Drive • Livermore • CA 94550](http://topconpositioning.com)

(925) 245-8300

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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.

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.

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