On-board Total Stations

- Advanced security and maintenance with TSshield™
- MAGNET® Field on-board
- Exclusive LongLink™ communications
- Fast and powerful EDM
- Advanced angle accuracy

Topcon’s OS Series total stations – advanced design with superior technology

The OS is a professional grade compact total station. This advanced design provides an on-board data collection interface, exclusive LongLink™ communication, and an incredibly powerful EDM.

Work directly on the bright, color touchscreen, or with the alpha-numeric keyboard, to achieve higher levels of production with MAGNET Field on-board software. The OS total station can be used on a wide variety of applications, from building layout to earthwork volumes, and land surveying, the OS is the productive choice.

On-board Windows® touchscreen

Running on-board software on the Windows® touchscreen computer increases productivity. The screen is large and bright, so the user can see more software functions and intuitively interact with the screen where needed. Software applications become easier to use and there is no need to hold a field controller in one hand while turning the instrument with the other. The OS has precise tangent locks to keep the angle positions accurate even with touchscreen and keyboard interaction.

Projects move faster by being able to do point collection, description entry, and on-screen calculations. The bright colorful screen provides enough resolution to view points, lines and icons, to help you make faster decisions. All of your data is stored in one spot, safely on-board.

Exclusive LongLink™

For stakeout and other operations where being at the prism pole with a field controller is critical, Topcon’s exclusive LongLink™ functionality allows you to operate a field controller more than 300 m away from the instrument. LongLink™ brings you flexibility you’ve never had before.
Color LCD touchscreen
Side mount extra long-life battery
Electronic leveling system
300 m range LongLink™ functionality
500 m non-prism range
Unique IACS angle encoder system (1" and 2")
Exclusive “STAR-KEY” functionality
Tangent lock – Securely holds your angle in place
Easy access, environmentally protected USB 2.0 slot (Host + Slave)
World's first TSshield™ system
### Angle Measurement

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. Resolution/Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS-101</td>
<td>0.5&quot;/1&quot;</td>
</tr>
<tr>
<td>OS-102</td>
<td>1&quot;/2&quot;</td>
</tr>
<tr>
<td>OS-103</td>
<td>1&quot;/3&quot;</td>
</tr>
<tr>
<td>OS-105</td>
<td>1&quot;/5&quot;</td>
</tr>
</tbody>
</table>

IACS: Standard on 1" and 2" models

Compensation: Dual-axis compensator

### Distance Measurement

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Prism EDM Range</td>
<td>4,000 m</td>
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<tr>
<td>Prism EDM Accuracy</td>
<td>2 mm + 2 ppm</td>
</tr>
<tr>
<td>Non-Prism Range</td>
<td>500 m</td>
</tr>
<tr>
<td>Non-Prism Accuracy</td>
<td>3 mm + 2 ppm</td>
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<tr>
<td>Measuring Time</td>
<td>Fine: 0.9 sec</td>
</tr>
<tr>
<td></td>
<td>Rapid: 0.7 sec</td>
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<tr>
<td></td>
<td>Tracking: 0.3 sec</td>
</tr>
</tbody>
</table>

### Communications

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

### General

- Display/Keyboard: Dual LCD Touchscreen (OS-105 Single Display)
- Battery Operation: Up to 20 hours
- Dust/Water Rating: IP65
- Wireless Connection: Bluetooth® Class 1
- Operating Temp: -30°C to 60°C

* Special Arctic and Desert versions available

### Easy Access USB 2.0 Memory
- Up to 8 GB storage
- Environmentally protected
- Compatible with industry standard thumb drives

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

### Advanced Angle Encoder System
- “Best in Class” 1" angle accuracy
- Incorporates exclusive IACS (Independent Angle Calibration System) on 1" and 2" models
- Self-calibration
- Proven High Accuracy Technology

### EDM Trigger Key
- Perfect touch location
- Promotes angle stability
- No torque when measuring on-board
- Water/Dust proof
- Easy for gloved hands