On-board Total Stations

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

Advanced design. 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 can be used on a wide variety of applications, from building layout to earthwork volumes, and land surveying.

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.

300 m range
LongLink™ functionality

World's first
TSshield™ system

Easy access, environmentally
protected USB 2.0 slot
(Host + Slave)

500 m non-prism range

Unique IACS angle encoder system
(1" and 2")

Electronic leveling system

Exclusive "STAR-KEY"
functionality

Side mount extra long-life
battery

Color LCD touchscreen

Tangent lock – Securely
holds your angle in place

Easy access USB 2.0 memory

- Up to 8 GB storage
- Environmentally protected
- Compatible with industry standard thumb drives

Angle Measurement	
Min. Resolution/Accuracy	
OS-101	0.5"/1"
OS-102	1"/2"
OS-103	1"/3"
OS-105	1"/5"
IACS	Standard on 1" and 2" models
Compensation	Dual-axis compensator

Distance Measurement	
Prism EDM Range	4,000 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/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	-30ºC to 60ºC* * *Special Arctic and Desert versions available*

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

TOPCON

For more information:
topconpositioning.com/os-series