TOPCON

DS SERIES

DIRECT AIMING
TOTAL STATION

Direct Aiming Total Station

- Automatic aiming technology
- MAGNET® on-board software
- Ultra-powerful, advanced EDM
- Exclusive LongLink™ communications
- TSshield™ advanced security and maintenance
- Rugged, waterproof design

In the bush, dim conditions, crowded traffic or harsh environments, the DS Series works perfectly

A professional motorized total station, the DS is a mid-ranged positioning product for the construction professional who is looking for productivity enhancement from servo motors and XPointing™ technology. The MAGNET® on-board software has an intuitive interface to assist with staking out complex structures. This rugged waterproof designed total station has the latest technology of TSshield™ advanced security and maintenance, and exclusive LongLink™ communications.

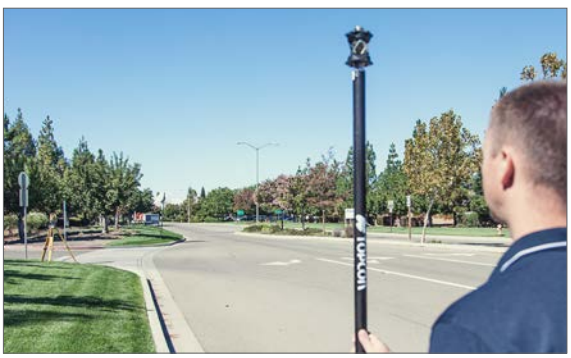
Work directly on the bright, color touchscreen or with the alpha-numeric keyboard, to achieve higher levels of production with MAGNET® Field on-board software. The DS total station can be used on a wide variety of applications, from building layout to earthwork volumes, and land surveying.

A world's first – TSshield™

Topcon is proud to offer another world's first technology in all DS 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 the activated instrument is lost or stolen, send a coded signal to the instrument and disable it. This feature secures the total station 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.



Auto collimation Xpointing™ technology

The DS Series employing Xpointing technology features a new intelligent algorithm that automatically aims to the prism with precisely corrected angle readings. The Xpointing technology works in dim or dark conditions where the prism can be difficult to find.

Whatever the job requires and wherever operators must go, the the DS gets your job done faster, while maintaining accuracy.


Fast and powerful EDM
1,000 m non-prism range
World's first
TSshield™ system
Advanced angle
accuracy
Easy access USB Type
A/B flash drive port
Exclusive "STAR-KEY"
functionality
Rugged waterproof/
dustproof IP65 design
Backlit 25 key keyboard and
directional arrow key

Telescope	
Resolving power	2.5"
Magnification	30x
Angle Measurement	
Min. Resolution/Accuracy	
DS-101	1"
DS-103	3"
DS-105	5"
Tilt Angle Compensation	
Compensation	Dual-axis compensator
Range	±6'
Distance Measurement	
Prism EDM Range	6,000 m
Prism EDM Accuracy	1.5 mm + 2 ppm
Non-Prism Range	1,000 m
Non-Prism Accuracy	2 mm + 2 ppm (0.3 - 200 m)
Measuring Time	Fine: 0.9 sec Rapid: 0.6 sec Tracking: 0.4 sec
Communications	
LongLink™ rover communications*	
USB 2.0 Slot (Host + Slave)	
RS-232C Serial	
General	
Display	Color Touch TFT 240 x 320 Display (Dual Display)
Keyboard	25 keys with illuminator (Single Keyboard)
Battery Operation	Up to 5 hours
Dust/Water Rating	IP65
Wireless Connection	*Bluetooth*® Class 1
Operating Temp	-20°C to 50°C

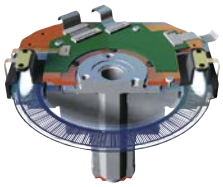
** The communication range may vary due to the condition of the area*

Ultra-powerful, advanced EDM

The 1,000 m reflectorless measurement can be achieved with a smaller beam spot size. Measurements can be as fast as 0.9 seconds in the accurate fine mode to most object surfaces over longer distance.

LongLink™ communications

LongLink is used to establish a wireless linkage with a data terminal at the prism side, in distances up to 300 m*. Configure an economical robotic system to enable even more productive data collection. Graphical navigation is available at the pole.



Advanced angle accuracy

Topcon's advanced angle encoder technology with exclusive calibration system provides "Best in Class" angle accuracy, up to 1-second (DS 101).

USB upgrade kit for auto-tracking

The DS Series firmware can be upgraded to automatically track a prism. This USB upgrade process is simple and will enhance productivity. The USB port can also be used to transfer data files.

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For more information:
topconpositioning.com/ds-series