

## Imaging Robotic Total Station



- Real-Time Video Imaging with 5MP Camera
- Auto-Tracking Technology
- Hybrid Positioning™ Ready
- Exclusive LongLink™ Communications
- RC-5 Quick Lock
- Rugged Waterproof Design

# DS-200i Series Imaging Robotic Total Station

**Use the DS-200i when imaging is required to document field activity or use photo documentation to settle disputes.**

The DS-200i is a mid-ranged professional motorized total station designed for the construction professional who is looking for productivity enhancement from servo motors and auto-tracking technology. The MAGNET® on-board software intuitive interface assists with image capture and photo notes of field activity. For even higher productivity levels, use a field controller with MAGNET Field software for robotic, one-operator control.

Work directly on the bright, color touch screen or with the alpha-numeric keyboard, to achieve higher levels of production with MAGNET Field on-board software. The DS-200i total station can be used on a wide variety of applications, from building layout to earthwork volumes and land surveying.

## **A World's First – TShield™**

Topcon is proud to offer another world's first technology in all DS Series total stations – TShield™. 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.

Daily connectivity to cloud-based Topcon servers inform of available software updates and firmware enhancements.

## **Photo Documentation with Live Video**

The 5 MP camera in the DS-200i provides an operator the ability to photo document and as-built. Office staff can easily identify objects in the field with description codes and attributes.

Live video provides the user verification that the total station is on the prism for quick reacquisition. With reflectorless measuring, take remote measurements through fences or distant objects, without losing time having to return to the tripod.



## **Ultra-Wide 5 MP Camera**

The 5 MP camera provides photo documentation of every measurement in the field or transmit live video.



## **Hybrid Positioning™ Technology**

Use both GNSS positioning and optical positioning data simultaneously to improve field measurement efficiency. Hybrid Search provides a quick lock for the prism.



## **Ultra-Powerful Advanced EDM**

The 1,000 m (3,280 ft.) reflectorless measurement can be achieved with a smaller beam spot size. Measurements can be as fast as 0.9 seconds.



## **Rugged Waterproof Design**

The IP65 rating provides protection from dust and driving rain as well as other inclement weather conditions. Operates in temperatures from -4°F to 122°F (-20°C to 50°C).



## PRIMARY FEATURES



## LONGLINK™

When connected with an external data collector, LongLink™ communication provides the power at the remote rod position. The remote operator records the data for codes and rod heights for as-builts, eliminating most common errors. For stakeout, the remote operator can view directions required to find the stake point. The system becomes an economical robotic system where the instrument man simply needs to follow and aim at the remote prism. The DS with the XPointing feature finds the center of the prism automatically. LongLink communication is built into the RC-5 and has the ability to send a signal to the total station to quickly re-acquire the prism.

## KIT COMPONENTS

### System Components

- DS Total Station
- Batteries and Charger
- Lens Cap and Hood
- Tool Kit
- Manual and USB Stick
- Carry Case with Straps



## SPECIFICATIONS

### Telescope

Resolving power 2.5"

Magnification 30x

### Angle Measurement (Min. Resolution/Accuracy)

DS-201i 1"

DS-203i 3"

DS-205i 5"

### Tilt Angle Compensation

Compensation Dual-axis compensator

Range  $\pm 6'$

### Distance Measurement

Prism EDM Range 6,000 m (19,685 ft.)

Prism EDM Accuracy 1.5mm+2ppm

Non-Prism Range 1,000 m (3,280 ft.)

Non-Prism Accuracy 2mm+2ppm (0.3 to 200m)

Measuring Time Fine: 0.9 sec

Rapid: 0.6 sec

Tracking: 0.4 sec

### Auto-Tracking

360° Prism Range 2 to 600 m (6.6 to 1,960 ft.)

Single Prism Range 1.3 to 1,000 m (4.3 to 3,280 ft.)

### Camera and Communications

5 MP Live video or photos

LongLink™ rover communications\*

USB 2.0 Slot (Host + Slave)

RS-232C Serial

### General

Display Color Touch TFT 240 x 320  
QVGA Display (Dual Display)

Keyboard 25 keys with illuminator  
(Single Keyboard)

Battery Operation Up to 5 hours

Dust/Water Protection IP65

Wireless Connection Bluetooth® Class 1

Operating Temperature -4°F to 122°F  
(-20°C to 50°C)

### Upgrade Options

Hybrid Positioning

RC-5 LongLink/Quick lock

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

For more specification information:  
[www.topconpositioning.com/ds-series](http://www.topconpositioning.com/ds-series)

## SOFTWARE

# MAGNET

A family of software solutions that streamlines the workflow for surveyors, contractors, engineers and mapping professionals.

## Field

### Modern User Interface

MAGNET Field provides a bright, graphical user interface with large touch icons, and bright readable text. The screens not only look good, but provide fast workflows.



### Easy-to-Use

The icon and text field interface has been optimized to provide both text and images to indicate what data is needed on each screen.



### Advanced Calculations

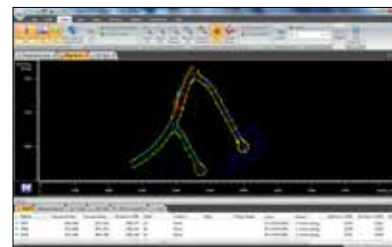
MAGNET Field on-board not only controls the measurements of the DS, but also provides many COGO and adjustment calculations right on the instrument.



## Office Tools

### MAGNET Office Tools

Review stored images of each point to better document field conditions. Great for dispute resolution.



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