

# Topcon IS-3 Series Imaging Robotic Total Stations

Topcon's ImagingStation (IS) combines the best of two worlds, advanced imaging and high-accuracy surveying, incorporating real-time field imagery with spatial data.

## Features & Benefits

- Scanning, Imaging and Robotic Total Station
- Two Digital Cameras - wide angle and tele-zoom
- The most advanced, longest range, and most powerful reflectorless technology available
- Integrated interference free 2.4 GHz Spread Spectrum robotic data communications
- WiFi Communication
- Photo Fieldbook

[View Promotional Video](#)



The IS's powerful functionality is controlled using Topcon's exclusive ImageMaster™ software that produces "photography with dimension", a revolutionary and cost-effective alternative to laser scanning.

### Scanning, Imaging and Robotic Total Station

The power, accuracy, and speed of a total station with the auto-scanning capabilities of a laser scanner; Topcon's IS-3 takes material management, as-built design and structural/environmental monitoring right at your fingertips. The IS-3 has six different methods to scan: Grid scan by a specific plane, Grid scan by square, Grid scan by a polygon, Grid scan by 1 line, Grid scan by All-Around, and Grid scan feature.

### Two Digital Cameras

The IS-3 features two dual digital imaging cameras providing color real-time image on the touch LCD or on a data controller. There is a wide angle 4 X digital camera and a 30X camera integrated through the lens so you know exactly where the instrument crosshairs are located.

### Long range Reflectorless Technology

With the long range non-prism range of up to 6,500 feet (2,000m) the robotic instrument can now scan long distances as well. Mining and monitoring applications can be accomplished.

### Integrated Spread Spectrum Radio

The user has the option to customize the system with either a RC-4 for spread spectrum communication or a WT-100 for Wifi. The RC-4 has the optional quicklock whereas the WT-100 has the touch drive. Simply touch the screen image to drive the cross hairs where you want. For the highest degree of data accuracy, clarity of image is key. That's why Topcon incorporates a 30x telescopic zoom with a Quarter Video Graphics Array (QVGA) Liquid Crystal Display (LCD). Using the telescope, pinpoint features to be measured or monitored precisely up to 6,500 feet (2,000m) away.

### Wifi Communication and Remote Networking

The IS has Wireless Local Area Network (WLAN) capability and can be controlled remotely via network or internet connection. Imagine sitting in the comfort of your office or vehicle and being able to scan, measure, control, and see what your instrument is seeing.

### Photo Fieldbook

A 360 degree panoramic image can be collected from any occupied instrument point historically representing all the features from the setup that day. Document the jobsite with photographs referenced on the horizontal and vertical

Angle Measurement	
Method	Absolute Reading
Minimum Reading	1"/5" (0.1 / 0.5mgon)
Tilt Correction	Dual Axis
Compensating Range	±6' (1.8m)
Distance Measurement	

<b>Prism Mode</b>	
1 Prism	9,840' (3,000m)
3 prism	13,120' (4,000m)
9 prism	16,400' (5,000m)
<b>Accuracy</b>	
Fine	±(2mm+2ppmxD*) m.s.e
Non-Prism Mode	4.9' - 820' (1.5m - 250m)
<b>NP Accuracy</b>	
Fine	±(5mm) m.s.e.
Non-Prism Long Mode	16.4' - 6,500' (5.0m - 2,000m)
NP Long Mode Accuracy	±(10mm + 10ppmxD*) m.s.e.
<b>Imaging</b>	
Cameras	(2) 1.3mp
Image speed	1-10 FPS
Scanning Max	20 pts/sec
<b>User Interface</b>	
Operating System	Microsoft Windows® CE.NET 4.2
Processor Type	Intel PXA255
Processor Speed	400Mhz
Display Panel	Full Color Touch-screen

The ImagingStation instrument and accessories fit into a single carrying case. This carrying case includes:

- Imaging Station
- Carrying Case
- (3) Batteries BT-65Q
- (2) Chargers BC-30
- Tribrach
- USB Cable
- On-board TopSURV
- ImageMaster IS
- CDs Support Material
- (2) Carrying Straps
- Sun and Rain Shields