

Long-range Scanning and Imaging Total Station



**Topcon's NEW laser scanning
alternative, from the World
Leader in digital imaging...**

- A ROBOTIC INSTRUMENT AND MUCH MORE.
- TWO DIGITAL CAMERAS – WIDE ANGLE AND 30X TELE-ZOOM
- SCAN WITH LIVE IMAGING
- INTELLIGENT SCAN FEATURE RECOGNITION
- FULLY ROBOTIC INTERNAL 2.4GHZ RADIO
- 6,500' (2000M) REFLECTORLESS MEASUREMENT
- REMOTE IMAGE DISPLAY BY TOPSURV AND IMAGEMASTER



The power, accuracy, and speed of a Total Station with the auto-scanning capabilities of a Laser Scanner; Topcon's IS takes material management, as-built design, and structural/environmental monitoring out of the clouds and puts it at your fingertips...

A new way to scan

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

ImageMaster™ Software

ImageMaster provides image and scan control of the IS through WiFi connection providing remote operation from the comfort of your vehicle or even an offsite location. Images are gathered using two digital cameras and stream stream video upto 10 fps. In addition to scanned and measured points, images can be used to provide additional "fill-in" data through the power of Topcon photogrammetry. All the functionality of Topcon's PI-3000 Image Modeler Software is included in ImageMaster. This gives you the ability to model and measure horizontal and vertical distance information across the entire image, even in between scanned points!

How it works:

Topcon's IS features dual digital imaging CMOS cameras providing a color, real-time image on the touch sensitive LCD display. To define a scan area, simply tap the image display, or for uniform measurement of an area, select the auto-grid feature. The IS "locks" these points to their exact position on the image, even when the instrument is rotated. Once all points to be measured are chosen, the IS performs a reflectorless measurement of each point.

Select a point - as precisely as you need

For the highest degree of data accuracy, clarity of image is key. That's why Topcon incorporates telescopic zoom with a QVGA LCD. Using the telescope, pinpoint features to be measured or monitored precisely up to 6500' away. No guessing at pixels on a blurry image!

Continuous monitoring

With a WiFi connection, image-based monitoring can be done continuously and remotely. Whether done with mounted prisms or reflectorlessly, this monitoring function compliments the everyday use function of our robotic surveying. The IS features Bluetooth® and WiFi wireless technology making continuous monitoring easy.



Set points to scan on the LCD with a tap...

Whether monitoring a mine, creating volume calculations, creating an area topo, structural/environmental monitoring, or even documenting as built, Topcon's IS provides a value-priced alternative to laser scanning. Topcon. It's time.



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Specifications subject to change without notice

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SPECIFICATIONS



ANGLE MEASUREMENT

Method	Absolute Reading
Minimum Reading	1"/5" (0.1/0.5mgon)
Accuracy	1", 3" (0.3mgon)
Tilt Correction	Dual Axis
Compensating Range	±6'

DISTANCE MEASUREMENT

Prism Mode	
1 prism	3,000m
3 prism	4,000m
9 prism	5,000m
Accuracy	
Fine 0.2mm / 1mm	±(2mm+2ppmxD*) m.s.e.
Non-Prism Mode	1.5m - 250m
NP Accuracy	
Fine 0.2mm / 1mm	±(5mm) m.s.e.
Non-Prism Long Mode	5.0m - 2,000m
NP Long Mode Accuracy	
Fine 1mm	±(10mm+10ppmxD*) m.s.e.

IMAGING

Cameras	(2) 1.3mp
Image speed	1 - 10fps
Scanning	Max 20 pts/sec

USER INTERFACE

OS	Microsoft Windows CE.NET 4.2
Processor	Intel PXA255 400Mhz
Screen	Full Color Touch-screen

A Total Station at heart...

The IS doesn't forsake its Total Station roots. The IS has all the features of our GPT-9000A robotic total station and more.

If advanced power of imaging is not for you, consider the Topcon GPT-9000A cable-free design.

Our 9000A series robotic system features sophisticated technology unique to Topcon – our one-touch quick lock feature that set the standard in Robotic target acquisition has taken another step forward, with the sleek new RC-3 system. All 9000A series robotic systems offer reflectorless measurement superior to any other instrument available – capable of precision measurements at a mind-boggling 2000 meters! Packed with a wide variety of advanced technologies, the Topcon GPT-9000A series robotic total station demonstrates why Topcon continues to be the world's leader in precision survey instrumentation:

- Innovative, completely cable-free system design
- Superior X-TRAC™ Quick-Lock tracking technology
- Full-color, graphical Windows Mobile instrument & field controller interface
- The most advanced, longest range, and most powerful reflectorless technology available
- Integrated interference free 2.4 GHz SpSp robotic data communications

Your local Authorized Topcon dealer is:

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