

## IS Imaging Station



**IS**  
IMAGING  
STATION



### Imaging Robotic Total Station

- Two Digital Cameras - Wide Angle and 30x optical zoom
- iSCAN Technology - Intelligent Scanning at up to 20 points per second
- iDRIVE - touch screen control
- 2000 m reflectorless measurement
- iCONTROL - Remote Control of Instrument by PC or Field Controller

## It's time.

Imagine the power, accuracy and speed of the proven Topcon 9000 robotic series, give it faster scanning capability and 2 cameras, and you have the IS. Advanced imaging and high-accuracy surveying techniques are combined in a single instrument. The powerful on-board functionality of the IS can also be controlled using Topcon's exclusive ImageMaster software that produces "photography with dimension", a revolutionary and cost effective alternative to laser scanning.

### How it works:

Topcon's IS showcases our proven robotic technology and combines this with dual digital Imaging cameras providing a colour, real-time Image on a touch sensitive LCD display. View your data in-situ and utilise the iSCAN routines for thorough data collection. Define your subject and then select either iSCAN Feature Detection or Grid Scan to automatically measure significant feature points or measure a "regular" grid of points.

### Select a point - as precisely as you need

Have confidence that the point you see on the screen is the point you would see through the telescope thanks to digital imaging using Topcon's coaxial 30x telescopic zoom. Navigate round your site using the wide angle camera and zoom-in to pinpoint the features measured up to 2000m away. Topcon's optical expertise compliments your quality survey skills, maintaining accuracy yet reducing time on site.

### The IS; built on a proven design.

Topcon's IS takes all the features of the GPT-9000A series and adds our Imaging capability into the package as well.

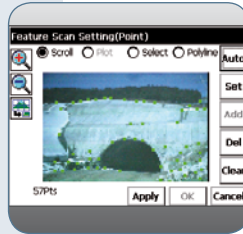
The IS series demonstrates why Topcon continues to be the world's leader in precision survey instrumentation:

- 2 Camera Imaging Solution
- Fast iSCAN measurement routines
- Superior X-TRAC™ Quick-Lock tracking technology
- The most advanced, longest range, and most powerful reflectorless technology available
- Integrated interference free 2.4 GHz Spread Spectrum robotic data communications.

Topcon's new IS series:

Superior Technology – Superior Design – Superior Performance.

## The new Topcon IS Series combines advanced technology and modern design innovations.



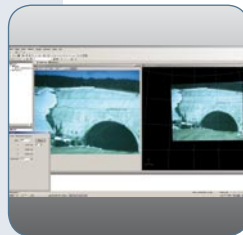
### iSCAN Technology

- Automatic feature detection and measurement - save time in the field
- Regular grid scan at up to 20 points per second - affordable access to the laser scanning arena



### iDRIVE Touch Control

- Control the instrument simply by tapping on the touch screen interface
- Seamlessly switch from rover to reflectorless measurement without having to return to the instrument



### iCONTROL

- Completely cable free Instrument Control
- Remote Connection via WiFi™
- Ideal for remote monitoring, Hazardous area or difficult location working



### Multiple Communication options

- 2.4 GHz Interference free spread spectrum Radio
- WiFi™ connectivity
- IR Interference free multiple channel
- Bluetooth®



### FC-200 Field Controller

- Integrated Bluetooth® wireless technology
- Internal WLAN
- 520 MHz Intel XScale® processor
- RS-1 radio module
- Super-bright Windows colour touch-screen interface

## Smaller – Lighter – Faster – Longer.

The Topcon IS series robotic total stations are the latest, most advanced system on the market today combining a new modern design and advanced technology.

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- |                                                                      |                                              |                                          |                                                              |
|----------------------------------------------------------------------|----------------------------------------------|------------------------------------------|--------------------------------------------------------------|
| <b>1</b> 2 Digital Cameras (Wide Angle and 30x Optical coaxial zoom) | <b>4</b> Long range 2000m reflectorless      | <b>7</b> Intergrated Bluetooth®          | <b>10</b> Bright Windows CE® colour touchscreen              |
| <b>2</b> Autofocus with Manual override                              | <b>5</b> WiFi™ compatible for remote control | <b>8</b> USB memory stick & CF interface | <b>11</b> Optional FC-200 with 520MHz XScale® processor      |
| <b>3</b> Rapid scanning up to 20 points per second                   | <b>6</b> Ultra Fast servo motors 85 deg/Sec  | <b>9</b> Built in 2.4 GHz radio          | <b>12</b> Optional RC-3 Quick-Lock & IR communication System |

### 2000m Reflectorless EDM Technology

- Most powerful reflectorless (Class 1) EDM available
- Long range power means unsurpassed short range performance
- Pinpoint accuracy with narrow, focused beam



### Complete Robotic System in 1 Case:

- IS 1" or 3" Instrument
- Charging Cradles
- FC-200 Controller
- RC-3 System
- Lightweight 360° prism
- Radio Antennas
- TopSURV on Board for IS
- ImageMaster (Remote Control and Office Processing software)
- Manuals & Utility software



**It's time.**

### The Leader in Positioning Technology ...

Topcon offers positioning products that deliver unparalleled site-wide performance and integration. Topcon's history of technological advances and our reputation for superior reliability means there's no other company positioned to provide you with a better "Total Positioning Solution."

From survey to inspection Topcon, through our dealer network, provides the innovative technology that gives surveyors, civil engineers, contractors, equipment owners, and operators the competitive edge by addressing such critical issues as increasing profits, quality craftsmanship, improving productivity, lowering operating costs, and enhancing job site safety.



Full positioning integration field-to-finish: That's the goal of Topcon. When it's time for you to step up to the next level, it's time to turn to Topcon.

### The Leader in Customer Satisfaction ...

To ensure that your Topcon instrument maintains peak performance, your local Topcon dealer offers factory trained and certified service technicians. If service isn't available in your area, our European Service Center offers a repair and return policy second to none.

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## SPECIFICATIONS

	IS-1	IS-3
<b>ANGLE MEASUREMENT</b>		
Method	Absolute Reading	
Minimum Reading	0,1 / 0,5 mgon	0,2 / 1 mgon
	0,5" / 1"	1" / 5"
Accuracy	0,3 mgon / 1"	1 mgon / 3"
Tilt Correction	Dual Axis	
Compensating Range	±6'	
<b>DISTANCE MEASUREMENT</b>		
Prism Mode		
- Range 1 / 3 / 9 prism	3000 m / 4000 m / 5000 m	
- Accuracy	±(2 mm + 2 ppm x D*) m.s.e.	
Non-Prism Mode		
- Short Range	1,5 m - 250 m	
Accuracy	±5 mm m.s.e.	
- Long Range	5,0 m - 2000 m	
Accuracy	±(10 mm + 10 ppm x D*) m.s.e.	
Rapid scan	Up to 20 Hz ±5 mm m.s.e.	
EDM Laser Class	Class 1 (IEC publication 825)	
<b>AUTOMATIC TRACKING</b>		
Tracking Speed	15°/sec	
Tracking Range	1000 m (with standard prism)	
Rotating Speed	85°/sec	
<b>IMAGING</b>		
Cameras	2 x 1.3 Mp ccd, wide angle apparent resolution equivalence to 4.8 Mp	
Image Speed	up to 15 fps	
<b>USER INTERFACE - FEATURE RECOGNITION SYSTEM</b>		
OS	Microsoft Windows CE®.NET 4.2	
Processor	Intel PXA255 400 MHz	
Screen	Full colour touch-screen	
Communication distance	up to 900 m (dependent on local conditions)	
Laser pointer	LD (visible laser)	



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