

## ADVANCED ROBOTIC TOTAL STATION SYSTEM



### Superior Tracking Technology

- XTRAC8 robust, accurate tracking system
- RC-4 Spread Spectrum Quick Lock
- Enhanced 2 km reflectorless range
- Integrated 2.4-GHz spread spectrum radio
- Completely cable-free
- Full Windows CE interface

It's time.

## Topcon's Quick Station QS Robotic Systems – Superior Technology, Design and Performance.

With our experience in optical instrumentation that spans more than 70 years, we have the know-how to design and build the very best Robotics systems available. We are proud to introduce our latest generation robotic instrument technology. With a modern and cable-free design, the QS Series offers the most advanced robotic technology available.

Our Quick Station 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 new RC-4 remote control system.

Dual laser integration significantly expands remote control coverage to speed up prism search and lock operations. The built-in Spread Spectrum Radio provides a convenient data link between the QS and Topcon's FC field controller range or Tablet PC, eliminating the need for an extra radio for the rover system.

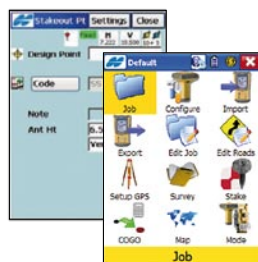
In addition, the QS features XTRAC8, a superior technology solution for reliable prism tracking. Employing entirely new optics, laser system, along with advanced algorithms, XTRAC8 provides the QS Series with unsurpassed ability to keep tracking a moving prism even under in the most challenging of environments.

Available in 1, 3, and 5 second angle accuracies, you can select the instrument that best fits your requirements. All QS Series robotic systems offer reflectorless measurement superior to any other instrument available. The Class 1 laser is able to measure to difficult objects such as wet roads or dark surfaces, and is capable of precision measurements at a mind-boggling 2 kilometres!

The Topcon QS Series robotic total stations are the most advanced systems on the market.

### ● TopSURV Field Controller Software

The easy-to-navigate, intuitive user interface of TopSURV software offers all users its full functionality with the shortest learning curve. TopSURV supports all surveying tasks, including topo data collection, as-built survey and stakeout.



### ● XTRAC8™ Technology

- Instantaneous re-acquisition of target lock
- Fourth generation Quick-Lock technology
- Multi-channel support
- 20% increase in operational range

### ● Advanced System Design

- Completely cable-free instrument and rover
- Integrated graphical Windows CE colour touch screen interface
- New, super-fast servo technology

### ● Integrated Radio System

- 2.4 GHz interference free Spread Spectrum Radio
- Fully integrated within instrument
- Remotely controlled using RC-4R with integrated wireless unit

### ● New FC-25A Field Controller

- Integrated Bluetooth® technology
- Lightweight and compact
- Windows Mobile colour touch-screen interface



## Faster – Smarter – Further – Stronger

The Topcon QS Series robotic total stations are combining modern design and advanced technology.

# QS

QUICK STATION



- 1** RC-4 Quick-Lock Communication Handle with Built-in IR
- 2** Super Long Range NP EDM – 2000 m!
- 3** Built-in 2.4 GHz Radio
- 4** Revolutionary XTRAC8 Prism Tracking Technology – 1000 m!
- 5** Easy Access Memory Card
- 6** Ultra-Fast Servo Motor Technology
- 7** Multi-Channel Support
- 8** Expanded Quick-Lock Field of View
- 9** Integrated Bluetooth®
- 10** 520 MHz XScale® Processor
- 11** W-LAN Support

● Field Controllers	FC-25A	FC-250	FC-2500
Windows Mobile® 6.5	●	●	
Lightweight and compact	●	compact	compact
Integrated Bluetooth®	●	●	●
520 MHz XScale® processor	●		
Optional RS-1 radio module		●	●
Fast 624 MHz processor		●	●
256 MB SDRAM, 2 GB Storage			●
Full Keyboard			●
Built-in Camera, Compass and Altimeter	●		camera

### ● Cable-free package solution

- All new QS Robotic Instrument
- RC-4R Remote Control with 2.4 GHz SS Radio
- Choice of Field Controller
- A7 360deg prism
- TopSURV controller 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 instruments 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.



[www.topcon.eu](http://www.topcon.eu)

The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Topcon is under license. Other trademarks and trade names are those of their respective owners.

Specifications subject to change without notice.  
©2010 Topcon Corporation. All rights reserved 11/2010

**SPECIFICATIONS**

	QS1A	QS3A	QS5A
<b>ANGLE MEASUREMENT</b>			
Minimum Reading	0.5"/1" (0.1/0.5 mgon)	1" / 5" (0.2/1 mgon)	1" / 5" (0.2/1 mgon)
Accuracy	1" (0.3 mgon)	3" (1 mgon)	5" (1.5 mgon)
Tilt Compensation	Dual Axis, Compensation Range: ±6'		
<b>DISTANCE MEASUREMENT</b>			
Measuring Range	1 prism: 3,000 m / 3 prism: 4,000 m		
Prism Mode	1.5 m to 250 m		
Non-Prism Mode	5.0 m to 2,000 m		
Non-Prism Long Mode			
Accuracy			
Prism Mode	2 mm + 2 ppm		
Non-Prism Mode	3 mm + 2 ppm		
Non-Prism Long Mode	10 mm + 1 ppm		
<b>AUTO TRACKING / AUTO COLLIMATING</b>			
Rotating Speed/Tracking Speed	Max. 85°/sec / Max. 15°/sec		
Tracking Range			
Prism Type 2	> 1,000 m		
A7 360° Prism	> 600 m		
Auto collimation accuracy	1.2 mm at 100 m		
<b>COMPUTER UNIT</b>			
Operating System/Processor	Microsoft Windows® CE.NET 4.2 / Intel XScale PXA225 400 MHz		
Display	3.5 inch TFT color LCD, Touch Screen		
Removable Memory Device	CF Card / USB Flash Memory		
Interface	USB 1.1 Type Mini-B for ActiveSync / Type A for USB Memory / RS-232C		
<b>WIRELESS COMMUNICATION</b>			
Bluetooth Unit	Ver. 1.2, Class 2		
Radio	Spread Spectrum Radio, Communication Range: approx. 1,000 m		
<b>ENVIRONMENTAL</b>			
Dust/Water Protection	IP54 (IEC 6029)		
Operating Temperature	-20°C to +50°C		
<b>RC-4 QUICK LOCK REMOTE (OPTION) SPECIFICATIONS</b>			
System Configuration	RC-4R Remote and RC-4H Handle Unit		
Quick-Lock Range			
Distance	400 m		
Angle (H&V)	±10° / ±4°		
Data Communication (RC-4R Remote)	Spread Spectrum Radio / Bluetooth Ver. 1.2 Class 2 / RS-232C		

Your local authorised Topcon distributor is: