

ROBOTIC TOTAL STATION SYSTEM



Superior X-TRAC™ Technology

- Innovative, completely cable-free design
- Superior X-TRAC™ Quick-Lock tracking technology
- Advanced, long range reflectorless EDM technology
- Integrated interference free 2.4 GHz SpSp robotic data communications
- Full-colour, graphical Windows CE® instrument & field controller interface

It's time.

The way we work is constantly changing. Adopting and utilizing the very best technology innovations for your business enables you to increase your productivity and profitability like never before. Robotic instrument technology and the significant performance advantages it can offer have changed the way topography and layout tasks are completed worldwide.

Faster, Lighter, Smaller - That's what the new GPT-9000A series promises ... and that's what Topcon delivers. With a modern, cable-free design, the GPT-9000A series offers the most advanced robotic technology available. From Topcon, the world leader in optical total station technology. Our GPT-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. Available in 1, 3, and 5 second angle accuracies, you can select the instrument that best fits your requirements. All GPT-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-colour, graphical Windows CE® 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
- Field Scan Imaging ready.

Topcon's new GPT-9000A series:

Superior Technology – Superior Design – Superior Performance.

The new Topcon GPT-9000A/GTS-900A Series combines advanced technology and modern design innovations.



X-TRACK™ Technology

- Instantaneous re-acquisition of target lock
- Third generation of Topcon's World's first Quick-Lock technology
- Combined Quick-Lock and IR communication technology



Advanced System Design

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



Integrated Radio System

- 2.4 GHz interference free Spread Spectrum Radio
- Integrated into side panel of the instrument
- Optional, snap-on radio module RS-1 for the FC-200



New FC-200 Field Controller

- Integrated Bluetooth® wireless technology
- New 520 MHz Intel XScale® processor
- Optional snap-on RS-1 radio module
- Super-bright Windows colour touch-screen interface

Completely cable-free system components

- GPT-9000A/GTS-900A Robotic Instrument
- FC-200 Graphical Field Controller
- RS-1 Radio System
- Lightweight 360° prism
- TopSURV field controller software



Smaller – Lighter – Faster – Longer.

The Topcon GPT-9000A/GTS-900A 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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|---|---|---|--|
| 1 RC-3 Quick-Lock & IR Communication Handle System | 5 Easy Access Memory Card | 9 Multi-Channel Support | 13 520 MHz XScale® Processor |
| 2 Super Long Range NP EDM - 2000 m! | 6 Ultra-Fast Servo Motor Technology | 10 Bright Windows CE® Colour Screens | 14 W-LAN Support (option) |
| 3 Built-in 2.4 GHz Radio | 7 USB Interface: Type miniB and Type A | 11 Integrated Bluetooth® wireless technology | 15 Camcorder Battery Power Supply |
| 4 Revolutionary X-TRAC Prism Tracking Technology - 1000 m! | 8 Infrared (IR) Communication Capability | 12 Optional Snap-on RS-1 2.4 GHz Radio | 16 Small, Round Prism-Top Design |

2000 m Reflectless EDM Technology (GPT-9000A)

- Most powerful reflectless EDM available
- Long range power means unsurpassed short range performance
- Pinpoint accuracy with narrow, focused beam



Complete Robotic System in 1 Case:

- GPT-9000A/GTS-900A Instrument
- Charging Cradles
- FC-200 Controller
- RC-3 System
- Lightweight 360° prism
- Radio Antennas
- 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 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.

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SPECIFICATIONS

	GPT-9001A/GTS-901A	GPT-9003A/GTS-903A	GPT-9005A/GTS-905A
ANGLE MEASUREMENT			
Method	Absolute Reading		
Minimum Reading	0,1 / 0,5 mgon	0,2 / 1 mgon	0,2 / 1 mgon
	0,5" / 1"	1" / 5"	1" / 5"
Accuracy	0,3 mgon / 1"	1 mgon / 3"	1,5 mgon / 5"
Tilt Correction	Dual Axis		
Compensating Range	±6'		
DISTANCE MEASUREMENT			
Prism Mode			
– Range 1 / 3 / 9 prism	3000 m / 4000 m / 5000 m		
– Accuracy	±(2 mm + 2 ppmxD*) 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 ppmxD*) m.s.e.		
Laser Class	Class 1 (IEC publication 825)		
AUTOMATIC TRACKING			
Tracking Speed	15°/sec		
Tracking Range	1000 m (with standard prism)		
Rotating Speed	85°/sec		
USER INTERFACE			
OS	Microsoft Windows CE®.NET 4.2		
Processor	Intel PXA255 400 MHz		
Screen	Full colour touch-screen		
Communication distance	about 1000 m		
Laser pointer			

