



# Specifications

**Model Name**                      **GPT-8201A**                      **GPT-8203A**                      **GPT-8205A**

**Measurement Range**  
 Prism Mode  
 1 prism                                      2 - 7,000m (6.6 - 22,900 ft) \*  
 Pin pole prism                            2 - 2,500m (6.6 - 8,200 ft) \*  
 Mini Prism                                 2 - 1,500m (6.6 - 4,920 ft) \*  
 \* Condition 1: Sight haze with visibility about 20Km (12.5miles) moderate sunlight with light heat shimmer.  
 Non-Prism Normal Mode                      3 - 120 m (9.8 - 394 ft)  
 Non-Prism Long Mode  
 Kodak Gray Card White (90%) surface                      30m - 1200m (98 - 3937 ft)  
 Kodak Gray Card Gray (18%) surface                      30m - 500m (98 - 1647 ft)

**Accuracy**  
 Prism Mode  
 Fine Mode                                      ±(2mm+2ppmxD\*)m.s.e.  
 Coarse Mode                                 ±(10mm+2ppmxD\*)m.s.e.  
 Non-Prism Normal Mode  
 Fine Mode 3 - 25m (9.8 ft - 82 ft)                      ±(10mm) m.s.e.  
 Fine Mode 25m (82 ft)                      ±(3mm+2ppm) m.s.e.  
 Coarse Mode                                 ±(10mm+2ppm) m.s.e.  
 Non-Prism Long Mode  
 Fine Mode (1mm mode only)                      ±10mm+10ppm  
 Coarse I Mode                                ±20mm+10ppm  
 Coarse II Mode                                ±100mm

**Least Count in Measurement**  
 Prism Mode  
 Fine mode                                      0.2mm(0.001ft) / 1mm(0.005ft)  
 Coarse mode                                 1mm(0.005ft) / 10mm(0.02ft)  
 Non-Prism Normal Mode  
 Fine Mode                                      0.2mm(0.001ft) / 1mm(0.005ft)  
 Coarse Mode                                 1mm(0.005ft) / 10mm(0.02ft)  
 Non-Prism Long Mode  
 Fine mode                                      1mm (0.005 ft)  
 Coarse I Mode                                5mm (0.01 ft)  
 Coarse II Mode                                10mm (0.02 ft)

**Measuring Time**  
 Prism Mode  
 Fine Mode                                      1mm: Approx. 1.2 sec.(Initial 3.0 sec.)  
                                                           0.2mm: Approx. 3.0 sec.(Initial 4.0 sec.)  
 Coarse Mode                                 10mm: Approx. 0.3 sec.(Initial 2.5 sec.)  
                                                           1mm: Approx. 0.5 sec.(Initial 2.5 sec.)  
 Non-Prism Normal Mode  
 Fine Mode                                      1mm: Approx. 1.2 sec.(Initial 3.0 sec.)  
                                                           0.2mm: Approx. 3.0 sec.(Initial 4.0 sec.)  
 Coarse Mode                                 10mm: Approx. 0.3 sec.(Initial 2.5 sec.)  
                                                           1mm: Approx. 0.5 sec.(Initial 2.5 sec.)  
 Non-Prism Long Mode (White Surface)  
 Fine mode                                      1.5 sec - 6.0 sec (Initial 6.0 - 8.0 sec)  
 Coarse I Mode                                1.0 sec - 3.0 sec (Initial 6.0 - 8.0 sec)  
 Coarse II Mode                                0.4 sec (Initial 4.0 - 7.0 sec)

**Angle Measurement**  
 Method                                      Absolute Reading  
 Minimum Reading                      0.5"/1"                                      1"/5"  
                                                           (0.1/0.5mgon)                                      (0.2/1mgon)  
 Accuracy                                      1"                                      3"                                      5"  
                                                           (0.3mgon)                                      (1mgon)                                      (1.5mgon)

**Tracking Method**  
 Maximum Turning Speed                      50°/ sec  
 Maximum Tracking Speed                      12°/ sec  
 Tracking Range                                Prism Type 2 : 8m - 800m  
                                                           360° Prism : 10m - 500m  
                                                           Reflector tape : 10m - 50m  
                                                           3"

Tracking Accuracy



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

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Specifications subject to change without notice

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Your local TOPCON dealer is:



# GPT-8200 Series

Advanced robotic total station



ISO 9001:2000  
FM 68448



The new GPT-8200 series from Topcon brings some of the most advanced instrument design available to the field.

RC-2IIW "Fast-Trak" system is comprised of these components:



**RC-2RW**  
Cable-free remote controller allowing radio-free communications to robotic total stations



**RC-2H**  
Replaces the standard instrument handle and includes 4 laser sensors, one on each quadrant of the handle

## GPT-8200 SERIES

The widest selection of precision instruments and a commitment to quality product and service have made Topcon the Number 1 instrument manufacturer in the World. Continuous innovation to improve design, operation and capability is the key to maintaining our leadership position. The new 8200 series, reflectorless robotic total station is no exception.

- Reflectorless Measurement up to 1200m or nearly 4000'
- Advanced reflectorless EDM design with two mode operation
- Completely cable-free operation with new wireless RC-2IIW
- Radio-free optical data communication
- Sophisticated tracking technology without expensive, special prisms
- Innovative Movement Anticipation tracking technology

The latest GPT-8200 reflectorless robotic total station from Topcon offers advanced design features at the best value on the market. When you compare the 8200 series to the competitors, the choice is clear.

**Innovation, not imitation. It's a way of life for Topcon.**

Continuing to bring you the most advanced positioning technology available.

**Superior Technology. Superior Design. Superior Performance and Productivity.**

Only from Topcon. The world leader in precision positioning technology.

## RC-2IIW "Fast-Trak"

Setting new standards for productivity and robotic control!

Topcon has taken advantage of our 70+ years of experience in the surveying and construction industry to bring a better solution to the field; we call it the RC-2 Remote Control System. The RC-2 provides the added functionality of an extremely quick way to regain instrument lock, and the capability of infrared (IR) communication free from radio interference. This system, added to our industry leading GPT-8200 Series robotic total stations, makes the Topcon robotic instrument line the most advanced and most productive system available today!



An added advantage of the Topcon RC-2 system is the ability to replace the traditional robotic system radios with infrared (IR) communication. The RC-2 provides IR communication to the instrument for distances up to about 800 feet away! This system eliminates the added hassles of radio interference, more cables and more batteries to charge. In fact, when using Topcon's RC-2 with IR communication, there is nothing hanging off of the instrument! Think about that the next time you break a cable or forget to charge a battery.



**Bluetooth®**

**WORLD'S FIRST**  
The World's First Completely Cable-Free Robotic System



**GTS-720 Series**  
Windows® CE Electronic Total Stations



**FC-100**  
Compact Windows CE® Field Controller



**GTS-820 Series**  
Auto-Targeting/Auto Tracking Robotic Total Stations



**GPT-3000W Series**  
Wireless, Dual-Optical Reflectorless Total Stations