

SURVEY PRODUCTS: GTS-820A series

 **TOPCON**

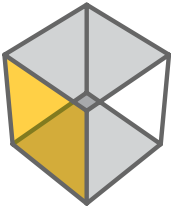


# GTS-820A series

**With RC-2II FastTrak**

- Optical Communications (Radioless)
- Instant Lock



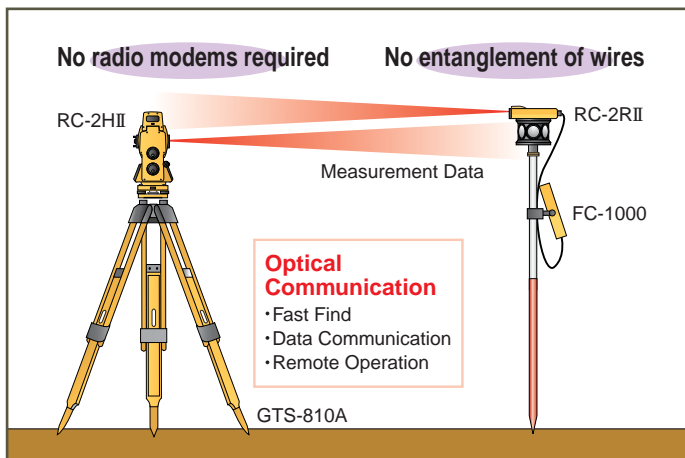


GTS-820 Robotic Total Station and RC-2II "FastTrak" System are the world's first robotic, one-man survey system which provides a level of productivity far beyond your expectations.

## Single person, Double speed.

### RC-2II FastTrak System.

The wireless, one-touch operation helps the GTS-820A to find where you are and lock on in seconds.



### Optical Communication System

Radio-free operation eliminates any chance of downtime caused by radio interference.

## RC-2II Remote Controller



The combination of the "Fast-Trak" feature and the latest Optical Communication System sets you free from radio related problems, and gives you the best performance in the industry.

- Remote Control
- Two-Way Communication
- Search/Turn Functions
- "Fast-Trak" re-acquisition



General Construction, surveying, Earthmoving, Mapping.  
No matter what type of work you do, topcon has a tool that will help you get the job done right. the first time.



**HiPer**  
GPS+  
receiver



**GPT-3000**  
Pulse Total  
Station



**System 5**  
3D Control Box



## Tracking Technology

GTS-820A offers advanced signal tracking CCD diodes and sophisticated firmware that outpaces the competition. Even when tracking a small peanut prism, the Topcon robotic system locks on and won't let go!

## Agility

Topcon's advanced auto-tracking and movement anticipation functions maintain prism lock and boost your productivity in tough environments.

## Flexibility

Should your job require shots beyond optical communication ranges, Topcon enables you to also use traditional radio technology.

## Durability

Waterproof and dustproof construction stands up to inclement weather and dusty jobsite conditions.

## optional accessories

• RC-2II



• Prism A3S



• Laser Plummet



• Solar filter-6



• Solar reticle-6



## standard components



GTS-820A .....	1 each
Battery BT-56Q.....	2 each
Battery charger BC-27BR (120V) or BC-27CR (230V) .....	1 each
Tool kit with case.....	1 set
Plastic carrying case.....	1 each
Silicon cloth .....	1 each
Plastic rain cover .....	1 each
Plumb bob set .....	1 each
Lens cap .....	1 each
Instruction manual .....	1 each



**DL-100 Series**  
Electronic Digital  
Levels



**FC-1000**  
Data Collector



**GB-1000**  
GPS+  
receiver



**RL-H2Sa**  
Dual Slope  
Laser

## yesterday

Topcon Corporation has been a world leader in optical, mechanical, and electronic integration (Optomechatronics) for over 70 years. With hundreds of patents to their credit, Topcon is the recognized leader in the manufacture of high accuracy positioning laser and optical products used world wide by the construction, civil engineering and medical industries.

## ... and today

Topcon continues to produce the world's most innovative products for the construction, survey, agriculture, and mining industries. We offer a full line of laser, sonic, GPS+, LPS, and optical devices for numerous specialized industry applications and tasks.

## there when you need us.

Topcon maintains a world wide network of factory trained and certified service and support technicians. Combined with our network of authorized distributors, we offer service and support second to none.

## RC-2II TECHNICAL SPECIFICATIONS

Operating Distance	16.4ft ~ 820ft (5m ~ 250m)
Weather Proof	RC-2RII: IPX5 / RC-2HII: IPX4
Operating Temperature	4°F ~ 122°F (-20°C ~ +50°C)
Power Supply	Four AA size dry cells (6V)
Operating Time	Normal use: Approx. 30+ hours
Weight	0.66lbs. (0.3kg)
Dimensions	6"(D) × 2.7"(W) × 1.49"(H) 154mm(D) × 69mm(W) × 38mm(H)

For more info on these or any other Topcon product log onto:  
[www.topcon.com](http://www.topcon.com)



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Specifications subject to change without notice

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## SPECIFICATIONS

Model Name	GTS-821A	GTS-823A	GTS-825A
Max. rotation speed		50°/sec	
Max. auto tracking speed		12°/sec	
Auto tracking range		2,600' (800m)	
Drive range		Throughout full revolution	
Search range			
Auto Tracking		User definable	
Auto Collimating		±5°	
Coarse Movement		Shuttle control	
		(output: 7 speed change)	
Fine Movement		Jog control (Minimum 1 sec.)	
Tracking accuracy (Repeatability)		Standard deviation 3" (at stable air condition)	
<b>Optical Communications (Radioless)</b>			
Range		825ft. (250m)	
<b>Distance Measurement</b>			
Measurement range			
Single Prism		7,200ft. (2,200m)	
<i>Visibility about 12.5 miles (20km), moderate sunlight</i>			
Measuring accuracy		(±2mm + 2ppm × D) m.s.e.	
Minimum reading		Fine 0.2mm/1mm	
		Coarse 1mm/10mm	
Measuring time		Fine 1mm mode	
Average		1.2 sec.	
Initial		approx. 3 sec.	
<b>Angle Measurement</b>			
Method		Absolute encoder	
Detecting		Horizontal: 2 sides	
		Vertical: 2 sides	
Minimum reading	0.5"/1"	1"/5"	1"/5"
Accuracy	1"	3"	5"
<b>Tilt sensor</b>			
Type		Dual axis	
Compensating range		±4'	
<b>Level sensitivity</b>			
Circular level		10'/2mm	
Plate level		30'/2mm	
<b>Plummet</b>			
Standard		Optical plummet	
<b>Others</b>			
Tracking Indicator		Yes	
Durability			
Protection against water and dust		IP54*	
Operating time		Normal use: 3.5h	
		Distance and Angle measurement: 6.0h	
Battery		2 pcs	

\* Degree of protection against water is defined as "protected against splashing water" and against dust is defined as "protected against solid foreign objects" for the GTS-820A based on the IEC60529 Standard.

TOPCON POSITIONING SYSTEMS, INC.



ISO 9001:2000  
FM 68448



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