



SURVEY INSTRUMENT

**TOPCON**



# GPT-7000 GPT-7000i Series

Reflectorless Windows CE®  
Total Stations



**CAPTURE  
REALITY**



ISO 9001:2000  
FM 68448

Finally, an on-board solution that makes hands free surveying a reality, with advanced reflectorless capability that outperforms all other instruments in its class! The GPT-7000 series, only from Topcon!

## GPT-7000 SERIES

As the world leader in precise positioning solutions, Topcon has a tradition of bringing innovative technology to the jobsite. The GPT-7000 series total stations continue this tradition by providing advanced reflectorless technology in addition to a convenient built-in Windows CE.NET operating system and large, full color graphic display with touch screen!

- New technology dual optical reflectorless capability
- Long range reflectorless operation out to over 820'
- Super bright, color, Windows® CE touch screen operation
- GUI (Graphical User Interface) boosts your productivity

- Built-in CCD Camera with Wide and Finder view (GPT-7000i Series)
- Field images recorded with field coordinates data (GPT-7000i Series)
- Complete with TopSURV™ on-board data collection software

### Advanced Reflectorless Capability

The GPT-7000 series gives you up to 250m reflectorless range, the longest in its class! Measure up to 3000m with a prism. The unique dual optical EDM design takes pulse laser reflectorless measurement to a higher level. Even at long distances, it maintains focused beam accuracy and allows you to measure only the target you select.

## New GPT-7000i Series IMAGING TOTAL STATIONS Capturing the Reality with Revolutionary Technology!

Topcon revolutionizes surveying with another World's First Technology. The GPT-7000i features a built-in digital camera for capturing job site images. The GPT-7000i provides you the best performance and most efficient surveying with precise long range EDM, TFT colour graphic display, and the latest Windows® CE technology, and the addition of image information.



### Windows CE Advantages

At Topcon efficiency and productivity are our priority. By adopting the latest Windows® CE technology, Topcon brings the advantages of the GUI (Graphical User Interface) to a Total Station. The large 3.5" TFT color LCD display is large and bright enough for you to view all your data at a glance. In bright sunlight, it adjusts automatically so you can see the display clearly. And the added advantage of a touch screen increases the convenience and ease of use of the GPT-7000 series. Whether you are an experienced user or just a beginner, the GPT-7000 will allow you to get up and running in no time.



**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



# Specifications

## Model Name GPT-7001(i) GPT-7002(i) GPT-7003(i) GPT-7005(i)

### Measurement Range

Prism Mode	3,000m (9,900 ft) *
1 prism	
* Condition 1: Sight haze with visibility about 20Km (12.5miles) moderate sunlight with light heat shimmer.	
Non-Prism Mode	1.5 - 250m (5 - 820 ft)

### Accuracy

Prism Mode	
To 25m	±(3mm+2ppmxD*)m.s.e.
25m or more	±(2mm+2ppmxD*)m.s.e.
Non-Prism (1.5m or more)	±5mm

### Least Count in Measurement

S. Fine Measurement Mode	0.2mm(0.001 ft)
Fine Measurement Mode	1mm(0.005 ft)
Coarse Measurement Mode	1mm(0.005 ft)
Tracking Measurement Mode	10mm(0.02 ft)

### Measuring Time

S. Fine Measurement Mode	0.2mm: Approx. 3.0 sec.(Initial 4.0 sec.)
Fine Measurement Mode	1mm: Approx. 1.2 sec.(Initial 3.0 sec.)
Coarse Measurement Mode	1mm: Approx. 0.5 sec.(Initial 2.5 sec.)
Tracking Measurement Mode	10mm: Approx. 0.3 sec.(Initial 2.5 sec.)

### Angle Measurement

Method	Absolute Reading			
Minimum Reading	0.5"/1" (0.1/0.5mgon)	1"/5" (0.2/1mgon)	1"/5" (0.2/1mgon)	1"/5" (0.2/1mgon)
Accuracy	1" (0.3mgon)	2" (0.6mgon)	3" (1.0mgon)	5" (1.5mgon)

### Tilt Correction

Type	Dual axis
Method	Liquid type
Compensating Range	±4'
Correction Unit	1"(0.1mgon)

### Computer Unit

OS	Microsoft® Windows® CE.NET 4.2
Processor	Intel XPA255 400MHz
Memory	
RAM	128MB (SDRAM)
ROM	2MB (FlashROM) + 256MB (Flash Memory)
Display Unit	(A portion is used for pre-installed programs and data management functions) 320 x 240 (QVGA) dots Graphic LCD TFT color display with back lights and touch panel function
Card System	2 Sides CompactFlash™ Card (Type I/II) 1 Side

### Interface

Serial I/F Port	RS-232C (6 pin) USB (Type Mini-B) for ActiveSync®
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### Level Sensitivity

Circular Level	10"/2mm
Plate Level	30"/2mm

### Optical Plummet

Magnification	3x
Focusing Range	0.5m to infinity
Image	Erect

### Durability

Water and Dust	IP54 (Based on the standard IEC60529)
Ambient Temperature	-20°C to +50°C (-4°F to +122°F)

### Laser Class

Class 1 (for distance measurement)
Class 2 (Laser Pointer On)



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

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Specifications subject to change without notice

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