



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)



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Specifications subject to change without notice

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