

# GPT-7500 Series

reflectorless/Windows CE

GPT-7501  
GPT-7503  
GPT-7505



As the world leader in precise positioning solutions, Topcon has a tradition of bringing innovative technology to the jobsite. The GPT-7500 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!

**Advanced Long Range Prisms Measurement Capability** – The GPT-7500 series gives you up to 2000m 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.

Windows CE technology on the GPT-7500 total station provides a bright graphic display, touch screen display, more functionality, better support for standard accessories like Bluetooth wireless technology, and more available software. It provides the ideal user interface for an integrated, on-board solution for the GPT-7500 total stations.

#### GPT-7500 Series Features:

- Advanced Lithium-ion Battery
- Removable Compact Flash Data card
- Powerful TopSurv on-board Software



 **Reflectorless**



**Accessories:**  
60487 BT-65Q Lithium-Ion battery pack  
60241 BC-30B 110V charger  
60243 F-25 USB cable

## specifications

#### Telescope

**Length** 150 Millimeters  
**Objective Lens Diameter** 45mm(EDM:50mm)  
**Magnification** 30x  
**Image** Erect  
**Field of View** 1° 30'  
**Resolve Power** 2.5"

**Min. Focus Distance** 1.3 meters

#### Measurement Range

**1 Prism** 9900 ft, 3000 meters

**3 Prism** 4000 meters

**Non Prism** 6500 ft, 2000 meters

#### Measuring Accuracy

**Prism Mode**  $\pm(2\text{mm}+2\text{ppmxD}^*)$  m.s.e. fine

**Non Prism Mode**  $\pm(5\text{mm})$  m.s.e. fine(3-25m),  $\pm(2\text{mm}+2\text{ppmxD}^*)$  m.s.e. (>25m)

**Minimum reading** 1mm(0.005ft.)/0.2mm(0.001ft.) fine

**Measurement time** 3.0 sec./1.2 sec.(Initial 4.0 sec.) fine

#### Angle Measurement

**Method** Absolute

**Detection** 2 sides horizontal, 2 side vertical

**Minimum reading** 0.5"/1" arc sec, 0.1/0.5 mgon

**Accuracy** 1" to 5" (see models)

**Diameter of Circle** 71 Millimeters

#### Tilt Correction

**Type** Dual Axis

**Compensating Range**  $\pm 4'$

**Correction Unit** 1" arc sec, 0.1 mgon

#### Computer Unit

**Operating system** Windows CE-NET 4.2

**Processor** 177 Mhz Hitachi SH7750R

**RAM** 64MB

**Display** 320x240 (QVGA) graphic LCD TFT color touch screen

**Card system** Compact flash

**Interface** RS-232 (6 pin), USB type B for ActiveSync

#### Environmental

**Circular level sensitivity** 10' / 2mm

**Plate level sensitivity** 30' / 2mm

**Optical Plummet** 3x Magnification

**Dimensions (HxWxL)** 13.5 (H) x 9.6 (W) x 8.6 (L) inches

**Instrument Weight (with battery)** 13.6 pounds, 6.2 kg

**Dust/Water Protection** IP54 rating

**Operating Temperature** -20° to +50° C, -4° to +122° F

#### Power

**Source** BT-65Q Lithium-Ion

**Capacity** 5000 mAh

**approximate battery life** 7.5 hours including distance measurement,

10 hours Angle measurement only

#### Battery Charger

**ID** BC-30B

**Recharging time** 4.0 Hours

TOTAL STATIONS

