



### KEY FEATURES

- A rugged, high-performance total station designed for building construction layout
- Survey-grade measurements from the industry leader... that you can achieve yourself
- Long-range reflectorless DR (Direct Reflex) capability for efficient one-person measurements
- Proven, powerful, easy-to-use Trimble total station software
- Advanced features that will increase your productivity and profitability



The Trimble® TS635 Total Station is a rugged, feature-packed mechanical total station designed to meet the needs of concrete and general contractors performing layout and alignment for building construction. Use the Trimble TS635 alone or partner it with the Trimble LM80 Layout Manager.

#### UNSURPASSED RELIABILITY FROM A BEST-IN-CLASS TOTAL STATION

The Trimble TS635 Total Station delivers practical hardware and software in a rugged (IP66)—but sleek and compact—housing.

#### The Advanced Features You Need for Every Job

Whether setting out points to align concrete forms, setting anchor bolts, staking building corners, or creating offset points for column lines, the Trimble TS635 makes your job more efficient and profitable, safer and easier:

- Long-range reflectorless DR (Direct Reflex) enables one person to measure even hard-to-reach points quickly and safely—up to 300 m without a prism.
- Superior optics provide clear sighting and precise aiming, so you can finish a job when it is done—not because you are losing light in the late afternoon or under cloud. Short- and long-distance focusing is faster. A Class 2 laser pointer assists measuring indoors.
- Avoid the hassle of cables with Bluetooth wireless connection to the Trimble LM80 Layout Manager.
- A laser plummet offers four levels of spot brightness, making the red dot easier to see on a bright day.
- Dual onboard lithium-ion batteries provide up to 16 hours of continuous service or 30 hours of intermittent service for less downtime due to loss of battery power.
- An illuminated graphic display provides easy operation in any field environment; the screen display is customizable to accommodate varying field requirements.

#### Proven Trimble Total Station Software That Is Familiar and Easy to Use

The Trimble TS635 Total Station employs onboard software that has been proven in the field. It is powerful but easy to use, and its familiarity means new TS635 users will be productive ... and meeting tight project deadlines ... in no time.

The software delivers powerful construction-specific layout programs, data collection and feature coding, stakeout programs, COGO calculation programs, and measurement functions. A full alpha-numeric keyboard provides dedicated keys for accessing software menus and modes.

#### BEST PERFORMANCE AND ACCURACY

You can always rely on the Trimble TS635 to deliver the accuracy you need. Its industry-leading distance and measurement capabilities and simple interface let you take control of your layout needs without third parties.

By partnering the TS635 with the LM80, you can achieve even greater performance via the powerful link to CAD or BIM software: Generate point position and description information directly from a file and effortlessly transfer this data between office and field.

#### A CONSTRUCTION LAYOUT SOLUTION FROM THE POSITIONING LEADER

Trimble is the industry leader in high-accuracy and precision positioning, delivering the latest in technology for construction layout solutions. So with the Trimble TS635 Total Station you can be assured of the quality of your work, and confidently stake your reputation on your results. In addition, Trimble 24/7 worldwide support means you are never alone; the surveying and construction professionals at Trimble are ready to lend a hand whenever you need it.

# TRIMBLE TS635 TOTAL STATION

## PERFORMANCE SPECIFICATIONS

### Angle Measurement

Accuracy (Standard deviation based on DIN18723) . . . 5" (1.5 mgon)  
Angle reading increments . . . 1"/5"/10" (0.2 mgon/ 1 mgon/ 2 mgon)  
Automatic level compensator . . . . .Dual-axis compensator  
Reading System . . . . .Absolute Encoder

### Distance Measurement

#### Prism Mode

Standard measurement . . . . . $\pm 3$  mm + 2 ppm (0.01 ft + 2 ppm)  
Tracking . . . . . $\pm 10$  mm + 5 ppm (0.032 ft + 5 ppm)

#### Direct Reflex

Standard measurement . . . . . $\pm 3$  mm + 2 ppm (0.01 ft + 2 ppm)  
Tracking . . . . . $\pm 10$  mm + 5 ppm (0.032 ft + 5 ppm)  
Shortest possible range . . . . .1.5 m (4.9 ft)

### Measuring Time

#### Prism Mode

Standard measurement . . . . .1.5 sec @ 20 m  
Tracking . . . . .0.8 sec @ 20 m

#### Direct Reflex

Standard measurement . . . . .1.8 sec @ 20 m, >30 m: +1.0 sec/10 m  
Tracking . . . . .1.0 sec @ 20 m, >30 m: +1.0 sec/10 m

### Range (at Standard Clear)

#### Measurement to Prism

1 prlsm (50 mm dia.) . . . . .5000 m (16,400 ft)

### Range (at Standard Clear)

#### Range Direct Reflex Measurement

Kodak Gray (90% reflective) . . . . .300 m

## GENERAL SPECIFICATIONS

Instrument plummet . . . . .Allidade Laser Plummet - 3x Optical Optional  
Dust and Water Protection . . . . .IP66  
Main Unit Weight . . . . .3.6kg (8.0 lbs)  
Battery weight . . . . .0.1 kg (0.2 lbs)  
Carrying Case Weight . . . . .2.3 kg (5.1 lbs)  
Display screen . . . . .Backlighted graphic LCD (128 x 64 pixel)  
Operating temperature . . . . .-20 °C to + 50 °C (-4 °F to 122 °F)  
Class II laser product label . . . . .Yes

### Telescope

Magnification . . . . .30x  
Aperture . . . . .45 mm (1.77 in)  
Illuminated crosshair . . . . .No

### Battery

Type . . . . .Internal li-ion batteries (2)  
Charge time . . . . .Approximately 2-4 hours  
Operating time . . . . .Approximately 26+ hours

## DATA TRANSFER AND RECORDING

Memory capacity . . . . .Approximately 10,000 records  
Data input/output . . . . .RS232C and Bluetooth  
LM80 interface . . . . .Optional

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*Specifications subject to change without notice.*



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