DATASHEET

Trimble TS600 SerieS ToTal STaTionS

SUPERIOR OPTICS allOw YOU TO wORk laTE In ThE daY OR UndER ClOUd COvER

dUal lIThIUm-IOn baTTERIES fOR UP TO 19 hOURS Of COnTInUOUS USE

lOng-RangE REflECTORIESS dR (dIRECT REflEx) TO mEaSURE haRd-TO-REaCh POInTS

IllUmInaTEd dISPlaY and OnbOaRd SOfTwaRE fOR EaSY OPERaTIOn In anY EnvIROnmEnT

Technology You Can Rely On

The Trimble® TS662 and TS635 Mechanical Total Stations are rugged, feature-packed instruments for contractors performing site stakeout and measurement functions on the construction site. With easy-to-use onboard software and an affordable price point, these two mechanical instruments are the ideal entry-point if you are looking to introduce technology to your job site.

Improved Efficiency

The Trimble TS600 Series delivers practical hardware and software in a rugged— but sleek and compact—housing. Whether performing stakeout, measuring points or lines or as-builts, the Trimble TS600 Series Total Stations make your task more efficient, safer and easier. Long-range reflectorless DR (Direct Reflex) enables you to measure even hard-to-reach points quickly and safely—up to 300 m without a prism.

Easy-to-Use Software

The Trimble TS600 Series instruments employ onboard software that has been proven in the field. It is powerful and easy-to-use, so you'll be more productive in no time.

The software delivers powerful construction- specific workflows for 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.

Industry-leading Performance

You can always rely on the Trimble TS600 instruments to deliver the accuracy you need. Industry-leading distance and measurement capabilities and a simple interface let you take control of your site surveying needs without the expense of third party subcontractors.

You can use the TS600 Series instruments standalone or paired with a Trimble TSC3 Controller and Trimble SCS900 Site Controller Software for a more robust graphical interface and additional functionality. When used with the TSC3 Controller, you can perform more advanced measurement tasks and wirelessly transfer this data to the office using Trimble Connected Controller functionality.

Unmatched Support

Trimble is the industry leader in high-accuracy positioning, delivering the latest technology and workflows for construction. So with a Trimble TS600 Series Total Station you can be assured of the quality of your work, and confidently stake your reputation on your results.

Training from your local SITECH ® Technology Dealer and support from the Trimble 24/7 worldwide network means you are never alone; surveying and construction experts are ready to lend a hand whenever you need it.

Trimble
The Construction Technology Standard
www.trimble.com

TRImbIE TS600 SERIES TOTal STaTIOnS

SPECIfICaTIOnS

dISTanCE mEaSUREmEnT

Reflectorless mode (white target) [1] . . . . . 1 .5 m to 300 m (4 .9 ft to 984 ft)
Range with Trimble specified prisms
Good conditions (no haze, visibility over 40 km (25 miles))
With reflector sheet 5 × 5 cm (2 in x 2 in)
Ts662 . . . . . 1 .5 m to 270 m (4 .9 ft to 886 ft)
Ts635 . . . . . 1 .5 m to 300 m (4 .9 ft to 984 ft)
With single prism 6 .25 cm (2 .5 in)
Ts662 . . . . . 1 .5 m to 3,000 m (4 .9 ft to 9,842 ft)
Ts635 . . . . . 1 .5 m to 5,000 m (4 .9 ft to 16,404 ft)
accuracy [2] (precise mode)
Ts662 prism . . . . . ±(2+2 ppm × d) mm
Ts662 Reflectorless . . . . . ±(3+2 ppm x d) mm
Ts635 prism . . . . . ±(3+2 ppm × d) mm
Ts635 Reflectorless . . . . . ±(3+2 ppm × d) mm
Least count
precise mode . . . . . 1 mm (0 .039 ft)
normal mode . . . . . 10 mm (0 .39 ft)

anglE mEaSUREmEnT

dIn 18723 accuracy (horizontal and vertical)
Ts662 . . . . . 2"/0 .5 mgon
Ts635 . . . . . 5"/1 .5 mgon
Reading system . . . . . absolute encoder

TEIESCOPE

Tube length . . . . . 125 mm (4 .9 in)
Magnification . . . . . 30×
Field of view . . . . . 1°20'
Minimum focusing distance . . . . . 1 .5 m (4 .9 ft)
Laser pointer . . . . . Coaxial Red Light

TIIT SEnSOR

Type . . . . . dual-axis
Method . . . . . Liquid-electric detection
Compensation range . . . . . ±3 .5'

COmmUnICaTIOnS

Communication ports . . . . . 1 x serial (Rs-232C)
Wireless communications . . . . . integrated Bluetooth

POwER

Internal Li-ion battery (x2)
output voltage . . . . . 3 .8 V dC
operating time [3]
Ts662 . . . . . approx 19 hours (continuous distance/angle measurement)
approx 57 hours (distance/angle measurement every 30 seconds)
approx 62 hours (continuous angle measurement)
Ts635 . . . . . approx 10 hours (continuous distance/angle measurement)
approx 26 hours (distance/angle measurement every 30 seconds)
approx 31 hours (continuous angle measurement)
Charging time
Full charge . . . . . 4 hours

gEnERaI SPECIfICaTIOnS

display face 1 . . . . . backlit, graphic LCd (128x64 pixel)
display face 2 (optional Ts662) . . . . . backlit, graphic LCd (128x64 pixel)
Laser plummet (optional) . . . . . laser class 2
point memory . . . . . 10,000 records
dimensions (W x d x h) . . . . . 149 mm x 145 mm x 306 mm
(5 .8 in x 5 .7 in x 12 .0 in)
Weight (approx)
Ts662 Main unit (without battery) . . . . . 3 .8 kg (8 .4 lb)
Ts635 Main unit (without battery) . . . . . 3 .6 kg (8 .0 lb)

EnvIROnmEnTaI

operating temperature range . . . . . –20 °C to +50 °C (–4 °F to +122 °F)
storage temperature range . . . . . –25 °C to +60 °C (–13 °F to +140 °F)
atmospheric correction
Temperature range . . . . . –40 °C to +60 °C (–40 °F to +140 °F)
Barometric pressure . . . . . 400 mmhg to 999 mmhg/533 hpa to
1,332 hpa/15 .8 inhg to 39 .3 inhg
dust and water protection Ip66

CERTIfICaTIOn

Class B part 15 FCC certification, CE Mark approval, C-Tick
Laser safety IEC60825-1 Ed . 2 .0 : 2007
Ts662 prism mode: Class 1 laser
Ts662 Reflectorless / Laser pointer: Class 3R laser
Ts635 Reflectorless / prism mode: Class 1 laser
Ts635 Laser pointer: Class 2 laser
Laser plummet (optional): Class 2 laser
Bluetooth type approvals are country specific

1 *White objects with high reflectivity (KGC 90%). Measuring distance may vary depending on targets and measuring conditions.*
2 *±(3+3 ppm × D) mm –20 °C to –10 °C, +40 °C to +50 °C (–4 °F to +14 °F, +104 °F to +122 °F)*
3 *Battery life specification at 25 °C (77 °F). Operation time may be shorter in low temperatures and if the battery is not new.*

Specifications subject to change without notice.



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