

R25T Total Station

High Precision
Total Station



R25T

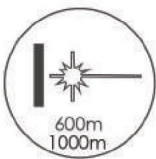
High Precision TOTAL STATION

High accuracy and long reflectorless range are the perfect combination that makes Stonex R25T the best friend of every professional surveyor.

Cadastral, mapping, staking out, and up to high precision monitoring works: within the range of R25T Series, you will find the solution that fits your needs.

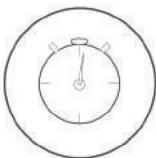
R25T comes standard with integrated onboard field software, a complete suite of applications, and an external controller can be linked to Stonex R25T, through the Bluetooth™ wireless connection: no limitation will stop your working process.

The trigger key on the side of the instrument allows you to start the measurement very easily.



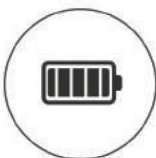
LIMITLESS DISTANCE MEASUREMENTS

By using digital phase laser ranging technology, R25T guarantees high accuracy long range measurements: 600/1000 m in reflectorless mode and up to 5000 m using a single prism, with millimeter accuracy.



FAST, ACCURATE, RELIABLE

Measuring distances in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The wide range of application software allows to complete the Surveyor's tasks directly in the field.



ONE DAY OF CONTINUOUS FIELD WORK

Thanks to the low power consumption circuit design and to the two high capacity batteries R25T gives the opportunity to continuously work up to 30 hours. No concern for data storage: the improved 4 Gb internal memory and the SD card up to 32 Gb store a huge amount of data.



TEMPERATURE PRESSURE SENSORS

Temperature and pressure changes have a negative impact on the accuracy of distance measurements: the smart R25T monitors the changes and automatically adjusts the distance calculations.





R25T

Friendly and intuitive total station

Whether the work is a basic survey or a long road staking out under full sun, R25T will always help you with a friendly user interface and its intuitive field software. The navigation menu drives the Surveyor into simple operations, and the results are displayed in a clear way.



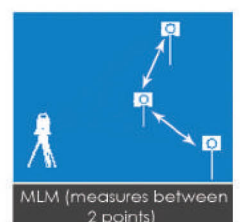
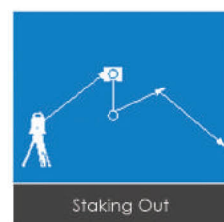
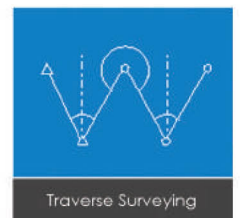
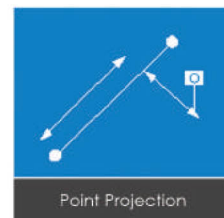
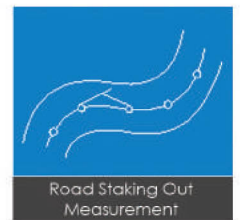
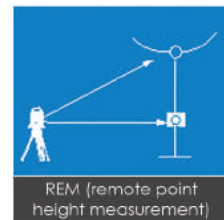
AUTOMATIC 2 AXIS COMPENSATION

The electronic dual axis compensator featuring a wide range automatically levels R25T when it is not perfectly horizontal; the status of the compensator is shown on the graphic display allowing an accurate levelling of the instrument.



WIDE RANGE OF COMMUNICATION OPTIONS

Standard RS232 interface, mini USB, SD card up to 32 Gb, guarantee a seamless in/out data flow to any external device. The wireless Bluetooth connection allows to connect R25T with handheld computers giving the possibility to use a custom field software on line with the instrument.



R25T TECHNICAL FEATURES

ANGLE MEASUREMENT

Accuracy ¹	2"
Reading system	Absolute encoder
	1" /5" /10"
Display Resolution (selectable)	0.0001g/0.0005g/0.001g 0.01mil/0.05mil/0.1mil
Angle Units	DEG 360°/GON 400/MIL 6.400

TELESCOPE

Magnification/ Field of view	30x/1°30'
Tube length	156 mm
Minimum focus distance	1.0 m (3.26 ft)
Reticle	5 brightness levels
Objective aperture	φ 45 mm
Laser pointer	Red light, coaxial
Resolving power	3"

TILT SENSOR

Type	Electronic, dual-axis
Compensation range/accuracy	± 3.0°/1"

DISTANCE MEASUREMENT RANGE²

Standard mode prism	3.000 m ³
Long mode prism	5.000 m ⁴
Reflective sheet (6cm x 6cm)	800 m ⁴
Reflectorless ⁶	Up to 600 m ⁴ Up to 1.000 m ⁴⁻⁵

DISTANCE MEASUREMENT ACCURACY⁷

Standard mode prism	2 mm + 2 ppm
Long mode prism	2 mm + 2.5 ppm
Reflective sheet (6cm x 6cm)	3 mm + 2 ppm
Reflectorless	3 mm + 2 ppm

MEASUREMENT TIME

Standard mode/Prism (Tracking/Fast/Fine)	0.4/0.6/1.0 sec
Reflectorless	1.5±5 sec

DISTANCE MEASUREMENT

Distance Unit	m/US ft/INT ft
Display Resolution	0.001m 0.01ft

LASER PLUMMET

Laser type	635nm semiconductor laser
Accuracy	1mm/1.5 m
Spot	± 1.5mm/1.5 m

LEVEL VIAL SENSITIVITY

Plate level	30°/2mm
Circular level	8°/2mm

ENVIRONMENTAL CONDITIONS

Operating Temperature	-20° C +50° C
Storage Temperature	-40° C +70° C
Waterproof/Dustproof	IP55

PHYSICAL SPECIFICATION

Dimensions	206 x 203 x 360 mm
Weight including battery and tribrach	6.0 Kg

POWER

Battery Voltage/Capacity	7.4V/3.400mAh Li-ion
Operating time (angle measurement)	Up to 30 hours
Operating time (distance meas. every 30 sec)	Up to 28 hours
Battery charger	110/220V, charging time 4h

OTHER SPECIFICATIONS

Display/Keyboard	Two sides, LCD 240x128 Dots/Alphanumeric
Memory	4Gb internal (More than 10M Points) SD card (max 32Gb) USB Flash Drive 32GB Supported
Interface	RS-232C/mini USB/SD card/ Bluetooth
Sensor	Temperature/Pressure

ON BOARD FIELD APPLICATION PROGRAMS

Data recording and management, Stake out, Area & Volume, Target offset, Hidden point, COGO, Tie distance, Remote height, Height transfer, Free station, Line/Arc stake out, Construction, Lead measure, Road

¹ Standard deviation based on ISO 17123-3

² Good condition: no haze, visibility about 40km, no heat shimmer, breeze.

³ Class 1

⁴ Class 3R

⁵ R25LR Model

⁶ Under optimal conditions on good surface

⁷ Standard deviation based on ISO 17123-4

STONEX AUTHORIZED DEALER

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