

STS2

TOTAL STATION

Built for Accuracy, Ready for the Field.



FIELD-READY ACCURACY

Designed for professionals, the STS2 delivers 2" angular accuracy, 1000m reflectorless range, and fast 0.2s tracking—ensuring smooth and precise measurement across diverse scenarios. With 5000m single-prism range and excellent EDM performance, it's ideal for both detail surveys and construction layouts.

SMART WORKFLOW CONTROL

With Bluetooth support, the STS2 integrates effortlessly with SingularPad software on a field controller. This enables full surveying and stakeout workflows within the same project and coordinate system, uniting GNSS and optical data collection. Prism operators can follow real-time stakeout positions for faster, more efficient field operations.

USER-FRIENDLY DESIGN

STS2 features a dual-display setup and a 29-key layout for smooth data entry and visibility from either side. Its precise telescope, high-visibility laser plummet, and robust IP54 housing ensure reliable performance in all weather conditions. Lightweight yet rugged, it's engineered for the everyday demands of professional surveyors.

DISTANCE MEASUREMENT

Range	- Non-prism: 1000 m - Single prism: 5000 m
Accuracy (reflector)	2 mm+2 ppm
Accuracy (reflectorless)	3 mm+2 ppm
Measurement time	- Tracking: 0.2s - Fine: 1.2s

ANGLE MEASUREMENT

Detection method	Absolute, continuous
Disk diameter	79mm
Minimum reading	1"
Accuracy	2"
Detection Method	V: Dual, H: Dual

COMPENSATION

Type	Dual-axis liquid-electric sensor
Compensator range	±6'
Correction unit	1"
Atmospheric correction	Manual input, auto correction
Prism constant	Manual input, auto correction
Temperature correction	Manual input, auto correction

PLUMMET

Plummet type	Laser plummet (default), optical plummet (optional)
Accuracy	±1.5mm @1.5m
Laser Brightness	5 levels adjustable
Wavelength	635nm
Laser Class	Class 2
Laser Power	0.5mW

VIAL

Circular level sensitivity	8"/2 mm
Plate level sensitivity	30"/2 mm

TELESCOPE

Magnification	30x
Aperture	- Effective: 45mm - DTM: 47mm
Field of view	1° 30'
Minimum focus	1.5 m
Resolution	3"
Multiple/Additive constant	100/0
Image	Erect
Tube length	152 mm

DISPLAY

Display	2.7" dual-side LCD
Resolution	160 × 96 dpi
Keyboard	Alphanumeric 29 Keys with backlight
Graphic Display	Max: 99999999.999 m Min: 1 mm

SYSTEM

Storage	16000 points
Interface	USB Flash Disk

ELECTRICAL

Battery voltage	DC 7.4V
Battery type	Lithium battery
Operating time	8 hours

PHYSICAL

Size	206mm × 200mm × 353mm
Weight	6.0 kg

ENVIRONMENTAL

Working temperature	-20 °C to + 50 °C
Waterproof & dustproof	IP54

All specifications are subject to change without notice.

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