

# STS1

## TOTAL STATION

Accuracy Without Compromise



### FIELD-PROVEN ACCURACY

Designed for professionals, STS1 features excellent EDM performance as its core advantage. It delivers 2" angular accuracy, 1000m reflectorless range and fast 0.2s tracking for stable and reliable data output in complex scenarios. It extends to 5000m measurement range with a single prism, fully covering detail surveying and large-scale construction layout needs.

### EFFICIENT WORKFLOW CONTROL

STS1 supports Bluetooth connection to link with SingularPad software, enabling seamless execution of surveying and stakeout workflows within an integrated system. Meanwhile, it is equipped with a USB drive data transfer function, allowing quick and secure import/export of measurement data without relying on complex network environments.

### USER-FRIENDLY DESIGN

STS1 features a 28-key layout tailored to professional operating habits, facilitating intuitive data entry and function selection. It holds an IP54 protection rating, ensuring stable performance in harsh outdoor environments. Its lightweight design also makes it easier to carry during long fieldwork, meeting the everyday demands of professional surveyors.

+86-21-60835489  
+86-21-60835497  
singularxyz@singularxyz.com  
www.singularxyz.com

**SingularXYZ**

SingularXYZ Intelligent Technology Ltd.

Floor 2, Building A, No. 599 Gaojing Road, 201702 Shanghai, China

## 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 28 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.

©2026 SingularXYZ Intelligent Technology Ltd. All rights reserved. SingularXYZ® is the official trademark of SingularXYZ Intelligent Technology Ltd., registered in People's Republic of China, EU, USA. All other trademarks are the property of their respective owners.