

## SPECIFICATIONS

	N6s 2"	
Distance Measurement		
Range	R10	R15
Reflector	5000m*1	
Reflectorless*2	1000m	1500m
Accuracy		
Reflector	±(1.5+2ppm x D) 1.5mm	
Reflectorless / Sheet	±(2+2ppm x D)mm	
Measuring Interval		
With Reflector	Fine < 0.3s, Tracking <0.1s	
Without Reflector	0.3s-3s*3	
Others		
EDM Type	Coaxial	
Minimum Reading	0.1mm	
Unit	Meter/ US.Feet/ Int.Feet/ Feet-inch	
Angle Measurement		
Accuracy	2"	
Reading System	Absolute Encoding	
Circle Diameter	79mm	
Minimum Increment	1"/5"	
Detection Method	Horizontal: Dual, Vertical: Dual	
Telescope		
Image	Erect	
Tube Length	154mm	
Effective Aperture	45mm (EDM:50MM)	
Magnification	30x	
Field of View	1°30'	
Minimum Focus Distance	1.2m	
Resolving Power	3"	
Tilt Sensor		
System	Dual Axis Liquid-Electric	
Working Range	±6'	
Accuracy	1"	
Communications		
Communication Ports	USB Port	
Data Interface	USB Stick, Bluetooth*5	
Effective Range of Bluetooth*5	10m	
Plummet		
Laser Plummet	±1.5mm at 1.5m	
Optical Plummet (Optional)	Erect Image	
Magnification	3 x	
Focusing Range	0.5m~∞	
Field of View	5°	
Power		
Type	Rechargeable Lithium battery	
Voltage	7.4V DC, 3100mAH	
Operating Time	18 Hours*4	
Level Vials		
Plate Vial	30"/2mm	
Circular Vial	8'/2mm	
Others		
Dust and Water Protection	IP 66	
Display	Dual Side, LCD 6 Lines	
Keyboard	Alphanumeric 24 Keys	
Operating Temperature	-20° ~ +60°	
Atmosphere Correction	Manual Input, Auto Correction	
Earth Curvature Correction	Manual Input, Auto Correction	
Prism Constant	Manual Input, Auto Correction	
Dimension	190mm x 195mm x 335mm	
Weight (approx.)	5.5kg	

Note: all information above is subject to change without any prior notice.

## STANDARD PACKING LIST

Main unit	1x
Lens cover	1x
Battery holder	1x
Battery LB-01	2x
Tools pouch	1x
Plummet	1x
Manual	1x
Charger LC-10	1x
Reflective sheet	1x
Carry case	1x
Belt	2x

\*1. Good Conditions: good visibility about 20km, overcast, no scintillation.  
\*2. Under Kodak Gray (90%). Measuring distance may vary depending on targets and the conditions.  
\*3. Measuring time may vary depending on measure distance and conditions. For the initial measurement, it may take a longer time.  
\*4. Battery life specification at 25° . It might be shorter in low temperature or if the battery is old.  
\*5. Bluetooth is optional hardware module for some countries, not permanent.

## OPTIONAL ACCESSORIES



ATS-2 Wooden Tripod  
NLS-15 Prism Pole  
TK21T Prism Set

You Local Authorized Dealer

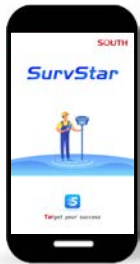
**SOUTH**  
Target your success

# N6s Series

## Best-Selling Total Station



- 2" Accuracy
- Long-Range Prism (5000m) and Non-Prism (1000m/1500m) EDM
- Trigger Key, Hot key for faster operation
- Cable-Free Connection by Wireless Bluetooth or USB Stick
- Bigger internal memory, Save 100,000 points
- Longer operation Time up to 18 hours per battery



Version: N6s 1.2  
27.03.2025

**SOUTH**  
Target your success

**SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.**

Add: South Geo-information Industrial Park, No.39 Si Cheng Rd, Guangzhou, China  
<http://www.southinstrument.com>



# What is new for N6s

## Outstanding Performance and Versatile Functions



### New Battery Housing

- Easy to lock and release
- One hand operation



### Trigger Key

- Faster operation
- Trigger in all measurement surface



### Easy Viewing Display

- 6-line with backlight on both faces.
- Easy-to-use 24-key pads with alphabet entry.



### Relocated Tangent Screw

Lock and fine adjustment tangent screw



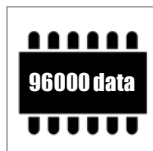
### USB Flash Disk

USB disk for data import & export, more convenient and keep it safe



### New Mainboard

- Processor upgrade to M7. More powerful process ability
- Lower consumption. Longer operation time up to 10 hrs by 1 battery



### Bigger Memory

Up to save 100,000 data blocks



### Technologies



1000/1500m  
Reflectorless



Ultra Fast  
Measurement



Co-axial  
Laser Beam



Ultra Low-  
noise Amplifier



Noise Phase  
Analysis



150MHz  
Carrier  
Frequency



Bluetooth



USB Flash  
Memory



Dual Axis  
Compensation



Laser Plummet



Laser Pointing



IP66

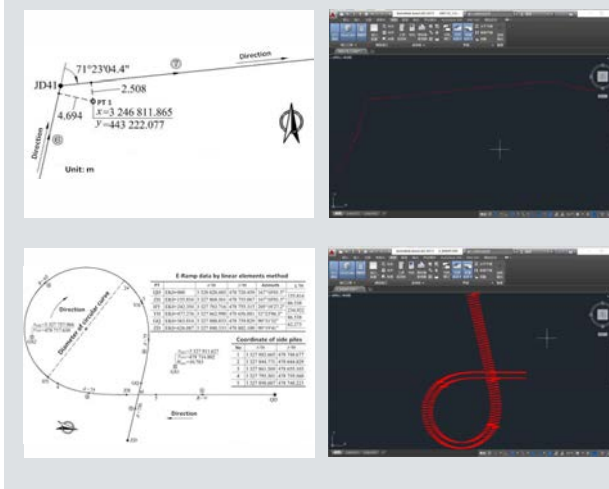
### New Hot Key Functions and BT Data Transfer

12 number key, 12 short path directly enter the application, less operation steps and higher efficiency.

Cable free data transfer work with transfer software, one key export to USB stick, generate TXT, CSV, SDR

### Optimized Road Program

The optimized road program offers a smart solution for road designing, editing and laying out. The new road program will calculate the horizontal and vertical curve in arbitrary geometric curved algorithm.



### Programes



REM



Resection



Road Design



Column Offset



Plane Offset



Distance Offset



Area Cal.



MLM



P/L SO

### Easy-to-use Onboard System

New tool-bar design on the side of screen, which helps you check the status of your N6s Total Station in real-time.

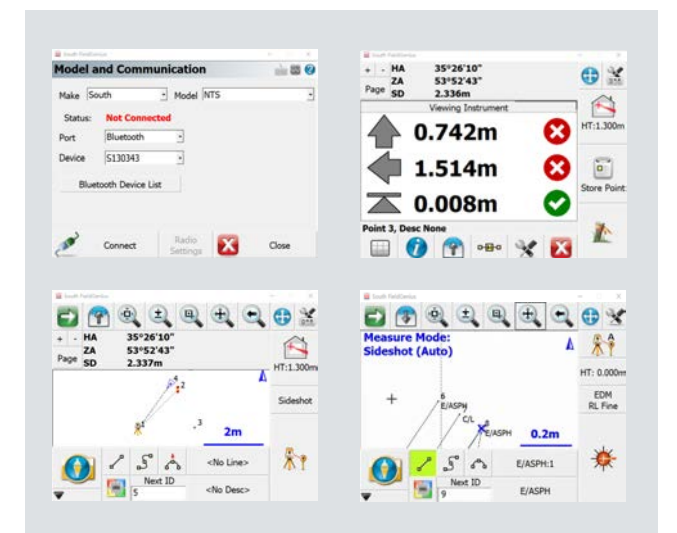
Choose N6s to meet your topographic needs as a superior mates. It offers a clear-to-view onboard system by it's easy-to-use but powerful programs.

Such as:

- Offset: angle, distance, column offset
- Set-Out Line: to calculate the coordinate of occupied point based on a known point and line

### Work on Data Collector

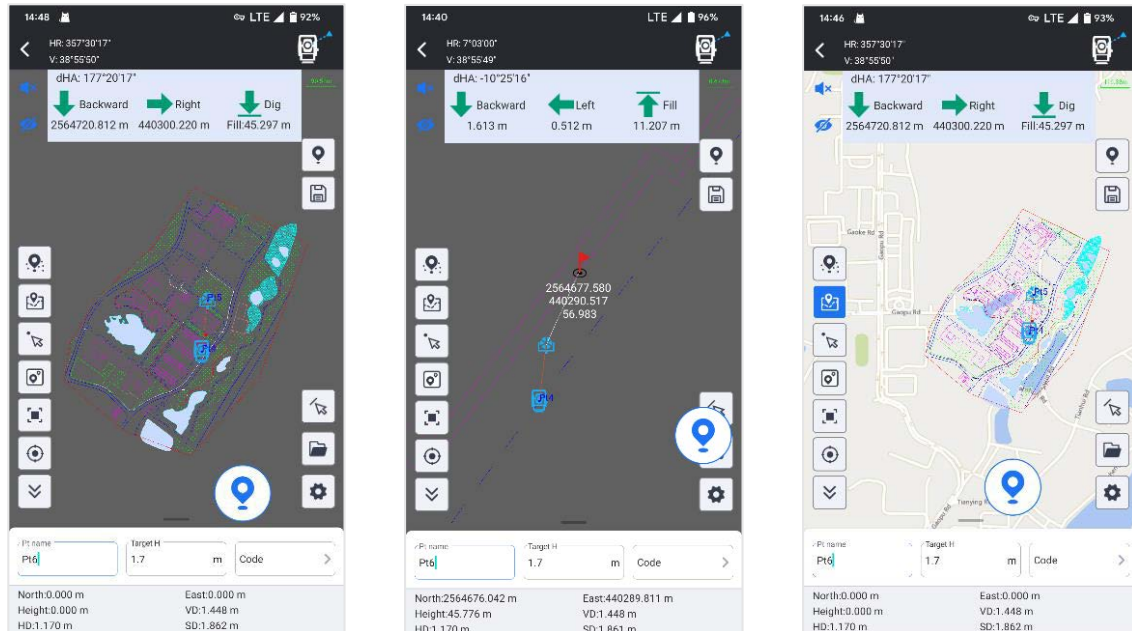
After added the Bluetooth module on N6s, you will have more possibilities to extend the applications on Total Station. With open source commands, you are easy to establish the communications between the N6s and other software you wish to use.





# Total Station Module of SurvStar App: Four Main Features to Give You More Power & Freedom

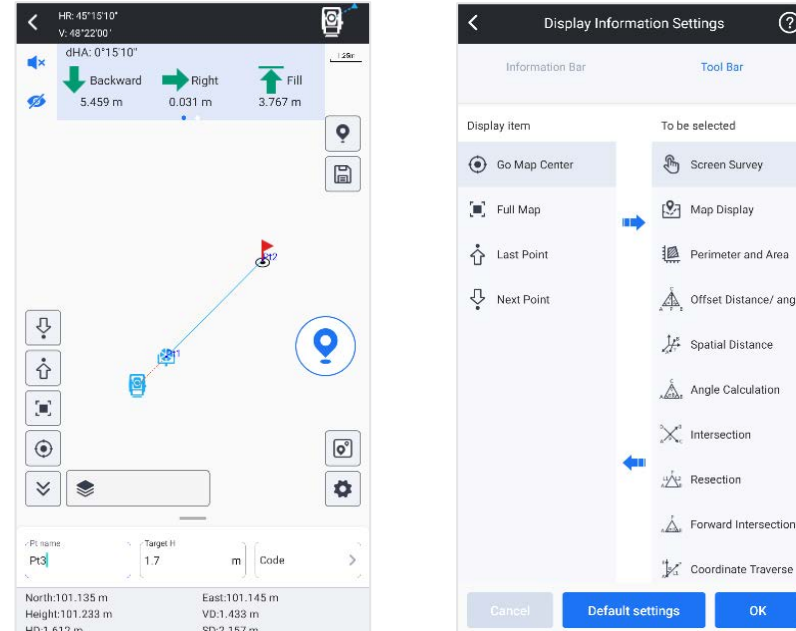
## CAD Stakeout: Increasing Productivity & Decreasing Error



CAD Stakeout allows you to import **CAD basemap** and stakeout it, without input point coordinates one by one.

When you need, you can connect to your local online map and overlap it to CAD basemap, to increase the precision of your job.

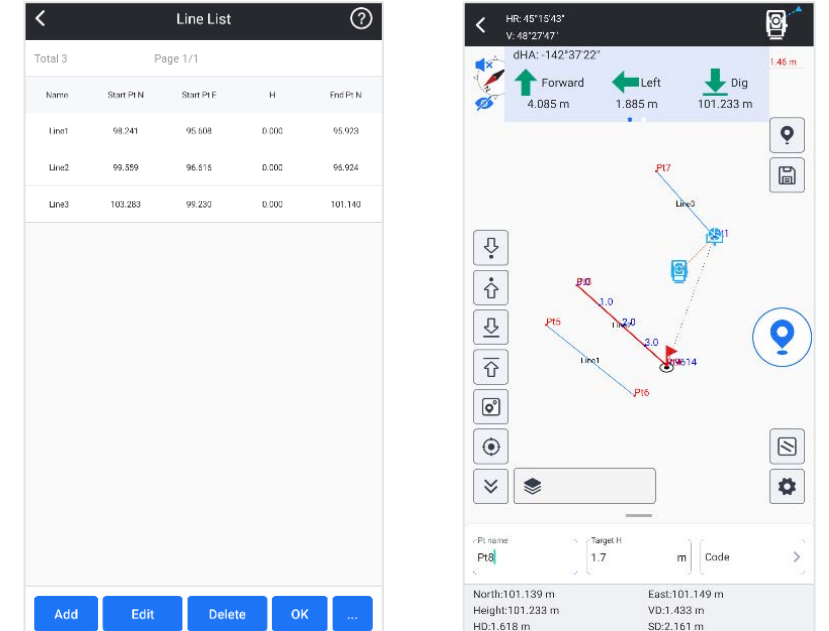
## Point Survey & Stakeout: More Ease and Convenience



With graphic display, now it is easy to you to observe the relation between occupied point and target points. It will help you to make less mistakes when measuring many points.

The stakeout program screen displays information more completely, indicates target points more intuitively, your workflow will be smoother than before.

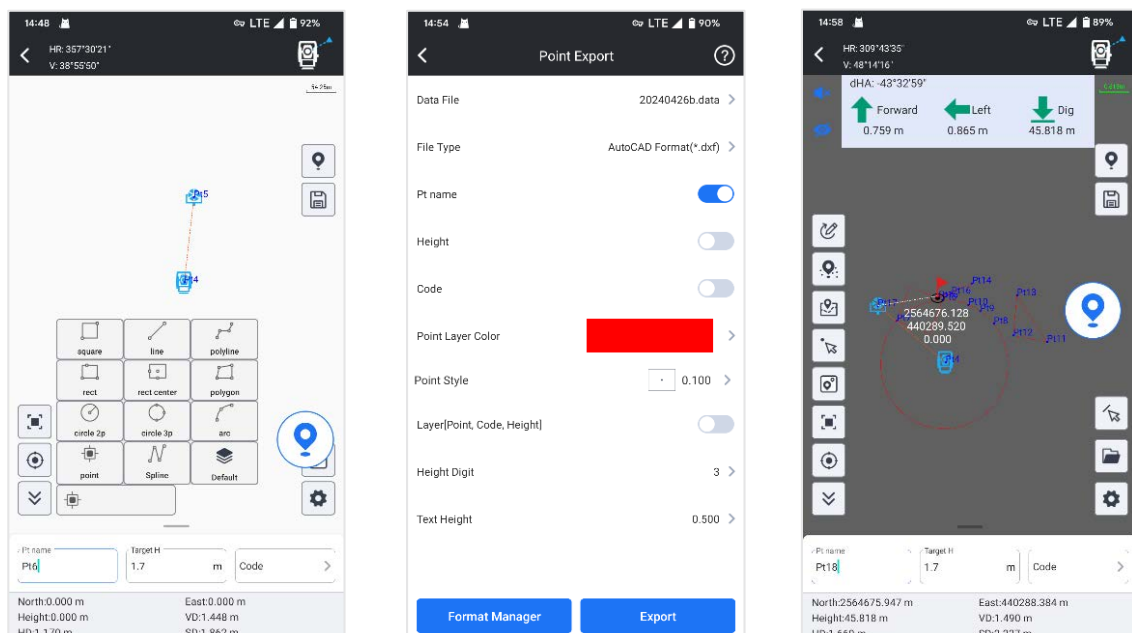
## Line Stakeout: Smarter than Traditional Way



User is allowed to manually choose points from library, line will be formed by program automatically. Then user input interval distance, setout points will be calculated out and displayed on screen.

This function is suitable for road or other objective that is containing lines.

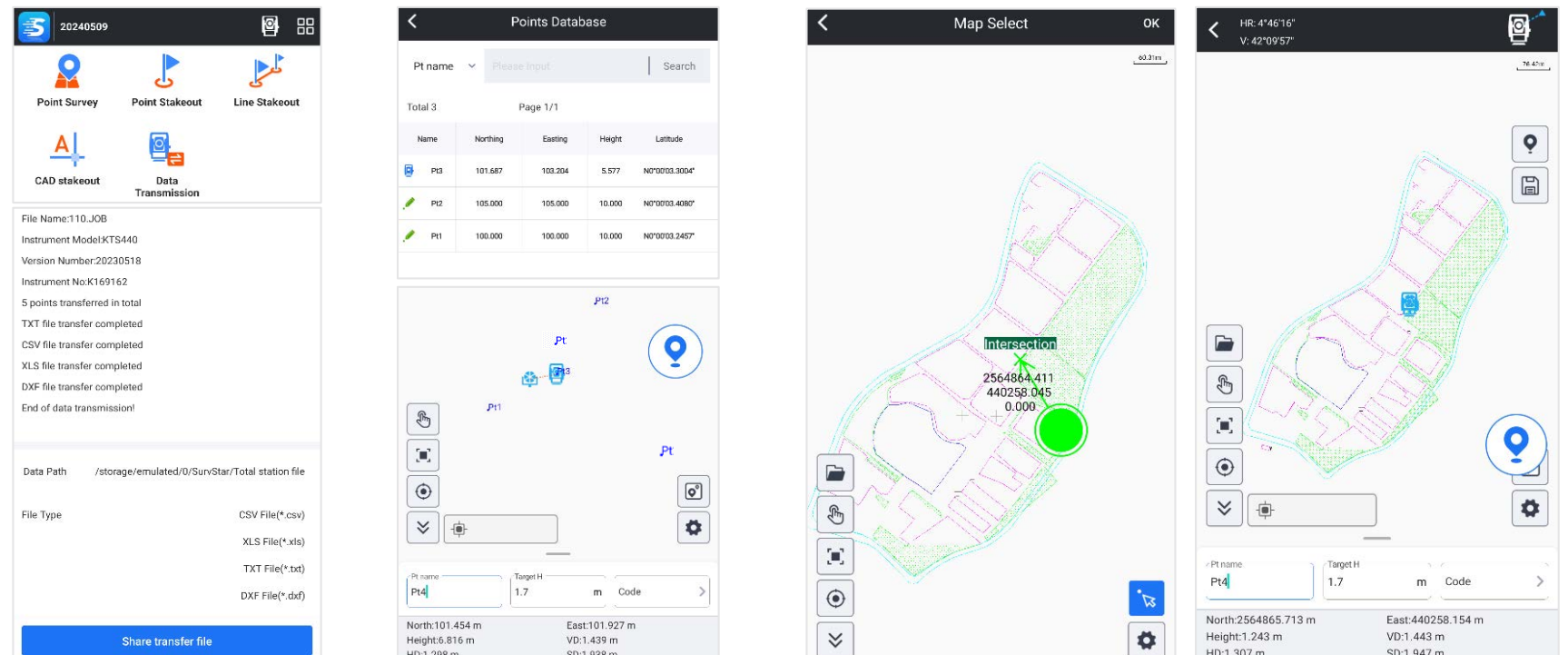
## Measure & Draw: Save Time in Both Field work and Indoor Work



User is allowed to draw line, polygon, circle...up to 11 kinds of graphic, while measuring target points. No need to manually draw draft map anymore.

User is allowed to manage different objectives as different layers. The draft map can be saved and output in CAD format, and to be used in indoor works.

## Other Features: More Innovation, No Limitation



Download & Share  
(.csv, .dxf, .txt, .xls)

Resection

Set Occupied Point from CAD basemap or Graphic Map

**Other Modules of SurvStar App: GNSS, Marine Survey, 3D Laser Scanner...**