

## SPECIFICATIONS

Distance Measurement ①		
Range	Reflectorless	1000m ②
	Prism	5000m ③
	Triple Prism	7000m
Accuracy	Reflectorless	3+2ppm
	Prism	2+2ppm
	Sheet	3+2ppm
Measurement Time	1.3s In Fine 0.2s In Tracking ④	
Atmospheric Correction	Manual Input, Auto Correction	
Prism Constant	Manual Input, Auto Correction	
Temperature Correction	Sensor Reading	
Distance Reading	Max:99999999.999m Min:1mm	
Angle Measurement		
Accuracy	2"	
Method	Absolute, Continuous	
Disk Diameter	79mm	
Detection Method	V: Dual, H: Dual	
Angle Reading	Min: 1"	
Telescope		
Image	Erect	
Tube Length	152mm	
Effective Aperture	45mm (EDM 47mm)	
Magnification	30x	
Field Of View	1°30"	
Resolving Power	3"	
Minimum Focus Distance	1.5m	
Reticle Illumination	10 Brightness Levels	
Operation System		
Memory	16000 Points	
Compensator		
System	Liquid, Dual Axis	
Working Range	±6'	
Accuracy	1"	
Plummet		
Laser Plummet (Default)	Accuracy	±1.5mm @1.5m
	Laser Brightness	5 Levels Adjustable
	Wavelength	635nm
	Laser Class	Class 2
Auto Height	Laser Power	0.5mW
	Working Range	0.5-3m
	Min. Reading	1mm
	Accuracy	±1.5mm
Optical Plummet (Optional)	Image	Erect
	Magnification	3x
	Focusing Range	0.5m ~
	Field Of View	5"
Guide Light		
Type	LED	
Wavelength	Red 635nm/ Yellow 590nm	
Effective Range	200m	
Keyboard And Display		
Keyboard	Alphanumeric 30 Keys	
Display	3.0 Inches, Color Touch TFT	
Resolution	240*400 dpi	
Position	Face 1, Face 2	
Interface		
Data Interface	USB Flash Disk, Bluetooth	
Battery		
Type	Lithium	
Voltage	7.4V	
Operating Time	8 hours	
Vial		
Plate Vial	30"/2mm	
Circular Vial	8'/2mm	
General		
IP Rate	IP54	
Temperature Range	-20°C ~ +50°C	
Dimension	206*195*353mm	
Weight	6.0kg	

## STANDARD PACKING LIST

Main unit	1x
Lens cover	1x
Battery holder	2x
Battery	2x
Tools pouch	1x
Manual	1x
Charger	1x
Reflective sheet	1x
Carry case	1x
Belt	2x

① EN60825-1: 2014, Class laser 3R; Wave Length 650-690nm ② With Kodak gray card (reflective 90%). The reflectorless range and accuracy may vary depending on targets, measuring conditions. ③ Under good conditions: No haze, visibility about 40km. Overcast, no scintillation. ④ Typical interval, under good conditions. Range less than 500m. It also depending on the target surface. Maximum interval less than 10s.

## OPTIONAL ACCESSORIES



ATS-2B (Fiberglass)  
NLS-15 Prism Pole  
TK21T Prism Set

You Local Authorized Dealer

**SOUTH**  
Target your success

# N3 Series Total Station



- 2" Accuracy, 1000m Reflectorless EDM
- 3.0 Inch Large and High-resolution Display
- Quick and Easy Trigger Key
- Save Time with Auto Height
- Built-in Guide Light for Stake Out

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

**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>

Version: N3 2.0

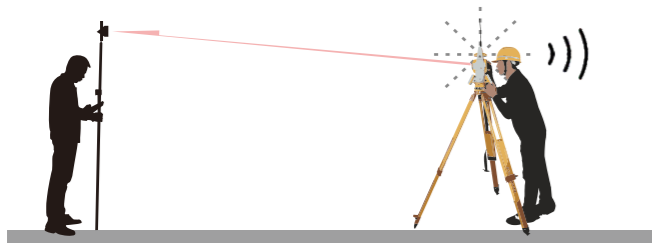


## 1000m Reflectorless EDM

EDM  
1000m

▶ Long-range reflectorless EDM with short interval of measurement, less than 1.3s.

▶ Advanced collimation with smaller laser dot provide fast and accurate aiming.



## Red/Yellow Guide Light



Guide Light

▶ Red and yellow guide light is built into the EDM as a standard feature.

▶ The guide light is extremely visible and easy to get into the correct direction line, enhancing the work efficiency of stake out in the range of 200m.



## Easy-to-Read Display Unit



Touch Screen

▶ 3.0 inches large and high-resolution display provides a clear visibility under tough conditions.

▶ Keypad and display unit can be illuminated in both sides.

▶ One-touch star key for instant access to functions or settings.



## Trigger Key



The measurement can be taken at any time with just a single button press by trigger key. You can measure and get the result without taking your eye off the telescope.

## Cable-Free Data Transfer



▶ N3 features Class 2, Bluetooth® 2.1+EDR module, it provide a faster and easier connection and data transfer to PC or controller.

▶ USB port for convenient data transfer.

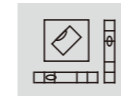
## Light but Durable Structure



Newly designed go-through structure allows a durable mechanical performance with light weight.



## User-Friendly Tools



▶ **E-bubble** for easier leveling and station set-up, which correct the horizontal and vertical angle readings automatically among the range of  $\pm 6'$  dual axis.

▶ **LPDM module** on built-in laser plummet is equipped for accurate instrument setup in all conditions.

## Easy-to-use Onboard System



▶ The intuitive, easy-to-use onboard system guided a fluent workflow with easy-to-understand icons

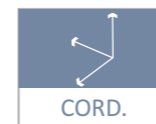
▶ N3 ensures a low learning cost when working in the field

## Cost-Effective Choice with Versatile Program

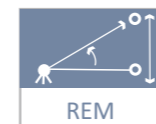


▶ N3 carries a variety of construction and survey application software on board, like Resection, COGO, Height Transfer, Offset, Stake Out and Roads.

▶ Work faster and cheaper than ever.



CORD.



REM



Point Stake-out



Distance Offset



MLM



Resection



Road



Area

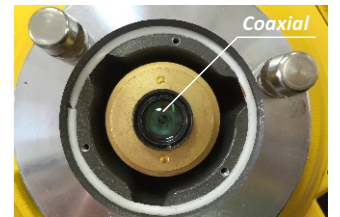
## Save Time with Auto Height Measure, Record and Set Its Own Height Automatically.

In the past, the operator have no choice but to measure the center height by tape and type it into total station by manual. The accuracy of measurement was under the responsibility of the operator with much more uncertainty.

But now, auto height enables the operator the get the instrument height with a simple press.

## How Does it Work?

Considering the limitation of space, we add a LPDM (Laser Plummet Distance Measure) model on the laser plummet to provide two functionalities into one part with unique co-axial structure: laser plummet for equipment centering together with auto instrument height.



Coaxial Design of Tx/Rx Unit

After receiving the reflected light from the ground, the LPDM module will calculate the instrument height automatically by it's integrated PCBA board. When activate the auto height, the result will directly applied to the current station.

## What Are The Benefits?

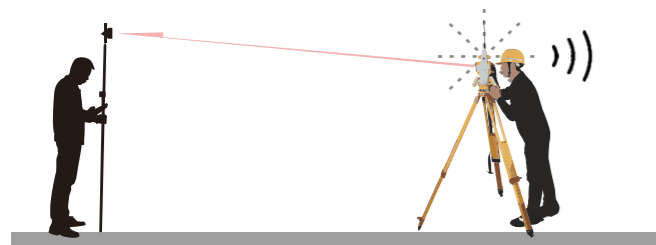
With integrated LPDM module on laser plummet, N3 can minimizes errors and accelerates the setup process onsite.

- Get the instrument height by a simple button press
- Save time and cost by accurate measurement
- No more mistakes from manual operations
- Not necessary to take extra accessory, e.g. tape



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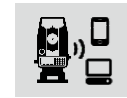
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