#### SPECIFICATIONS

| Distance Measureme           |                  |                                      |
|------------------------------|------------------|--------------------------------------|
| Range                        | Reflectorless    | 1000m ②                              |
|                              | Prism            | 5000m ③                              |
| 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:999999999999 Min:1mm             |
| Angle Measurement            |                  |                                      |
| Accuracy                     |                  | 2"                                   |
| Method                       |                  | Absolute, Continuous                 |
| Disk Diameter                |                  | 79mm                                 |
| Detection Method             |                  | V: Dual, H: Dual                     |
| Angle Reading                |                  | Min: 1"                              |
| Telescope                    |                  | With 1                               |
|                              |                  | Erect                                |
| Image<br>Tube Longth         |                  | Erect                                |
| Tube Length                  |                  | 152mm                                |
| Effective Aperture           |                  | 45mm (EDM 47mm)                      |
| Magnification                |                  | 30x                                  |
| Field Of View                |                  | 1°30"                                |
| Resolving Power              |                  | 3"                                   |
| Vinimum 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                | Accuracy         | ±1.5mm @1.5m                         |
| (Default)                    | Laser Brightness | 5 Levels Adjustable                  |
|                              |                  |                                      |
|                              | Wavelength       | 635nm<br>Close 2                     |
|                              | Laser Class      | Class 2                              |
| Auto Height                  | Laser Power      | 0.5mW                                |
|                              | Working Range    | 0.5-3m                               |
|                              | Min. Reading     | 1mm                                  |
|                              | Accuracy         | ±1.5mm                               |
| Optical Plummet              | Image            | Erect                                |
| (Optional)                   | Magnification    | 3x                                   |
| -                            | Focusing Range   | 0.5m ~                               |
|                              | Field Of View    | 5"                                   |
| Guide Light                  |                  |                                      |
| Туре                         |                  | LED                                  |
| Wavelength                   |                  | Red 635nm/ Yellow 590nm              |
| Effective Range              |                  | 200m                                 |
|                              |                  | 200111                               |
| Keyboard And Display         |                  | Alakanumania 20 Kau                  |
| 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 (Optional) |
| Battery                      |                  |                                      |
| Туре                         |                  | Lithium                              |
| Voltage                      |                  | 7.4V                                 |
| Operating Time               |                  | 8 hours                              |
| Vial                         |                  |                                      |
|                              |                  | 30"/2mm                              |
| Plate Vial                   |                  |                                      |
| Circular Vial                |                  | 8'/2mm                               |
| General                      |                  |                                      |
|                              |                  | IP54                                 |
| IP Rate                      |                  |                                      |
| IP Rate<br>Temperature Range |                  | -20°C ~ +50°C                        |
|                              |                  | -20°C ~ +50°C<br>206*195*353mm       |

#### ANDARD PACKING LIST

| Main unit        |
|------------------|
| Lens cover       |
| Battery holder   |
| Battery          |
| Tools pouch      |
| Manual           |
| Charger          |
| Reflective sheet |
| Carry case       |
| Belt             |
|                  |

1x 1x 2x

> 2x 1x 1x

1x 1x 1x 2x

EN60825-1: 2014, Class laser 3R; Wave Length 0-690nm ② With Kodak gray card (reflective %). The reflectorless range and accuracy may ry depending on targets, measuring conditions. 0 Under good conditions: No haze, visibility out 40km. Overcast, no scintillation. ④ Typical ierval, under good conditions. Range less than 0m. It also depending on the target surface. aximum interval less than 10s.

#### PTIONAL ACCESSORIES



S-2B (Fiberglass) S-15 Prism Pole 21T Prism Set

# SOUTH Target your success



- 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

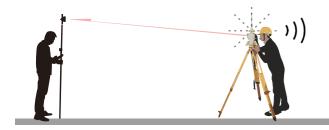


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#### 1000m Reflectorless EDM

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**



▶ 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



► 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 ±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 easyto-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.





## 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



Coaxial Desian of Tx/Rx Unit

structure: laser plummet for equipment centering together with auto instrument height.

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

