

SPECIFICATIONS

Angle Measurement

Accuracy..... 1" -2"
 Reading System..... Absolute, continuous four-quadrant
 Display Resolution..... 0.1"/1"
 Angle Units..... DEG 360°/GON 400/MIL 6.400

Telescope

Magnification/ Field of view..... 30x/1°30'
 Tube Length..... 154mm
 Minimum focus distance..... 1.2m
 Reticle..... 5 brightness levels adjustable
 Objective aperture..... 45 mm (EDM: 50 mm)
 Pointer..... Red laser dot

Tilt Sensor

Type..... Dual axis, liquid photoelectric sensor
 Compensation range/ accuracy..... ±4/1"

Distance Measurement Range

Standard prism mode..... 3500m
 Reflectorless..... 1000m(for 1" version)
 800m(for 2" version)

Distance Measurement Accuracy

Standard prism mode..... ±1 mm+1 ppm
 Reflectorless..... D<500 m: ±2 mm + 2ppm
 D>500 m: +5 mm + 2ppm

Measurement Time

Standard prism mode (Tracking/Fine)..... 0.1 /0.3 sec
 Reflectorless..... 0.3-3 sec

Distance Measurement

Distance Unit..... m/US ft/INT ft
 Display Resolution..... 1280x720

Motorization

Technology..... DC Servo Motor
 Max rotation speed..... 60°/sec
 Rotation time F1/F2..... 2.9 sec

APR

Centering range..... 3-1200m(Standard prism) 800m(360°prism)
 Time..... 3-5sec
 Search range..... ±1.5° (Support window search)
 AIM accuracy..... ±1 mm @ 100 m

PS

Search range..... 1.5-450m
 Search time..... Typically 90°: 3.5 s
 Angle..... H: 360° V: ±18°

Laser Plummet

Laser Type..... Red laser dot, 635 nm
 Accuracy..... ±1.5 mm at 1.5 m

Level Vial Sensitivity

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

Environmental

Operating Temperature..... -30°C to +50°C(-22°F to 122°F)
 Storage Temperature..... -40°C to +70°C(-40°F to 158°F)
 Waterproof/Dustproof..... IP55
 Humidity..... 95% non-condensing

Physical

Dimensions..... 217 x 198 x378 mm
 Weight (battery and tribrach inclusive) 7 kg

Electrical

Battery Voltage/Capacity/Type..... Li-ion rechargeable battery ×2,
 5400mAh
 Operating time..... Up to 6 hours
 Battery charger..... 110/220V, charging time 4h

Others

CPU..... MTK6762
 Display..... 5.5-inch, TFT LCD screen, 720 x1280 px (2 displays)
 Keyboard..... 17 keys ×2
 OS..... Android 11
 Memory..... RAM: 4GB, ROM: 64GB
 Interface..... RS232
 USB Type-C (OTG)
 Micro SIM
 TF Card
 Data transfer..... Long range communication 450m
 WLAN
 USB-OTG
 Network 4G
 Temperature and pressure sensor

Onboard Field Program

SurvStar



SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.
 Telephone- 011-49995999 , Mobile- +91-9999999255
 Location: 1111,11th Floor, RG Trade Tower Plot No. B-7.Netaji Subhash
 Place Pitampura New Delhi -110034
 Email: india@southprecision.in



NS30

Robotic Total Station



- ONE PERSON SURVEY & MONITORING
- 1" -2" ANGLE ACCURACY OPTIONAL
- 1200M APR, 450M PRISM SEARCH
- LOCKNTRACK FUNCTION
- CONVENIENT NUMERIC KEYBOARD
- NEXT GENERATION SURVSTAR

(V.202412)

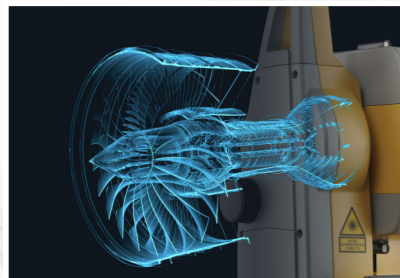
CATCHES SIGHT ALL-IN-ONE

ONE ROBOTIC TS, UNLIMITED APPLICATIONS



Zigbee or Long-range BT

Excellent connectivity includes multiple communication methods like Zigbee or long-range BT, and others.



DC Servo Motor Control

Direct Worm&Gear, more stable and reliable for motorization, with positioning accuracy less than 1"



4+64GB Memory & LTE Support

NS30 has 4GB of RAM and 64GB of internal storage, making multitasking and storing files fast and stable; With 4G LTE modem, NS30 can connect to internet and share data.



Multiple Data Logger Options

Ready to work with different external devices such as tablets, smartphones, controllers, etc.



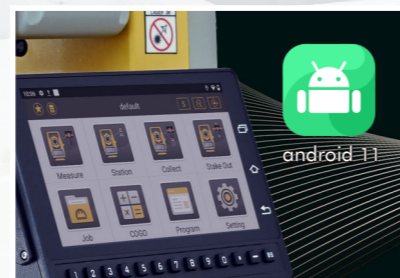
Prism Search and LocknTrack

NS30 enables you to search, recognize and aim a prism in 300m. With LocknTrack, it easier to lock onto the prism and follow its movements constantly.



APR-Automatic Prism Recognition

Able to recognize the prism and measure within 1200m line of sight, accuracy best up to 1mm@100m under tough conditions



Android operating system

Android 11.0, faster system response, faster app launch. Open platform, support secondary development, can be pre-installed third-party apps.

NS30 One Person Survey

Traditional Mode (without RTK)

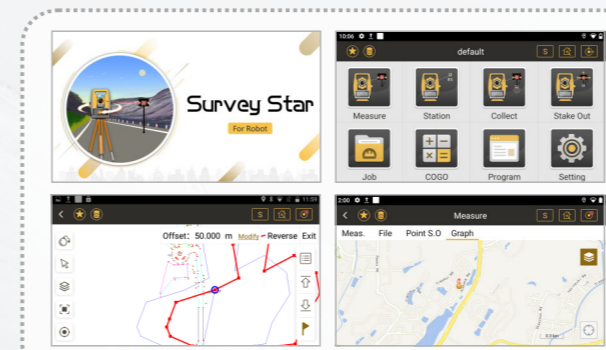
Under Tradition mode, NS30 is able to achieve functions like Prism Search, APR, and LocknTrack. Also Long-range data link offers a flexible and agile remote control for One Person Survey system.

Prism Plus Position Mode (with RTK)

Prism Plus Position (PPP) mode includes NS30, RTK, 360° Prism, Prism Pole and SurvStar APP. Under this mode, SurvStar receives data from NS30 and RTK at the same time and can switch surveying mode freely: When NS30 can find prism directly, we use NS30 to survey, when there's blockings, we use RTK. With the help of RTK data, NS30 Station Setting is more convenient. RTK Search solution makes NS30 much faster to find the Prism again. All those features increases efficiency of One Person Survey system.



APPs for NS30



Survey Star and Survey Star Pilot

Survey Star helps you collect the data and stake out efficiently by graphical and iconic guidance.

Map-Driven Workflow-It is an interactive function embedded in Survey Star, with visible features.

CAD Stakeout-Not necessary to extract the coordinate from CAD files anymore. The only thing you need to do is import the CAD files directly to stake out the points.

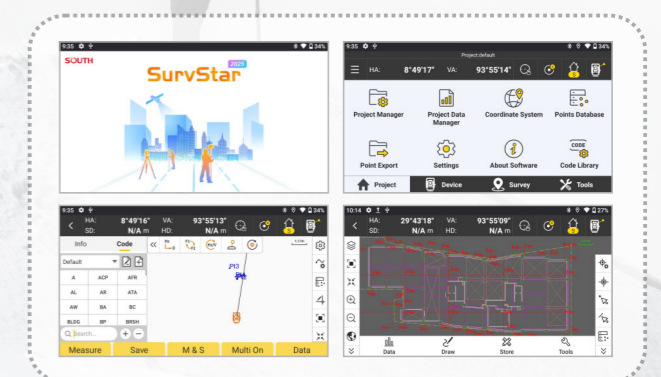
SurvStar

SurvStar is next generation of Surveying and Mapping App which supports multiple platforms and multiple SOUTH instruments Besides, SurvStar has features like:

Code Library Survey-We can give Code and Graphic features to surveying points, which makes mapping and road survey easier.

High performance CAD-We can survey, stakeout, draw and edit CAD seamless switching between Survey and CAD modules. Also optimized algorithm makes SurvStar load big size CAD files faster.

PPP Mode-We can use SurvStar to connect TS and RTK at the same time to get a powerful One Person Survey system.



Automated Monitoring

By delivering exceptional angular and distance measurement accuracy, NS30 enables precise detection of minor displacement changes at monitoring points. This robotic device helps to improve monitoring efficiency and reduce labor costs through automated targets recognizing, aiming, measuring, data recording. Enjoying extraordinary environmental adaptability, it features superb reliability under adverse weather conditions. In addition, wireless communication on board allows users to perform remote control and data management anytime, which makes it an ideal choice for monitoring jobs.

