

SPECIFICATIONS

| Performance | | | |
|------------------------|---------------------------|--|--|
| Angle Measurement | Accuracy | 1" | |
| | Measure Method(HZ/V) | Absolute, continuous, 4 path detective | |
| | Diameter of Encoder Disk | 79mm | |
| | Minimum Reading | 1"/0.1" | |
| | Compensator Type | Dual axis, liquid photoelectric | |
| | Compensator Accuracy | 1" | |
| Distance Measurement | Compensator Range | ±6' | |
| | Laser Output*1 | Class 3R | |
| | Measuring Range | Prism*2 | 3500m |
| | | Reflectorless*3 | 1000m |
| | Accuracy | Prism | ±(1mm+1ppm•D) |
| | | Reflectorless | D<500m: ±(2mm+2ppm•D) D>500m: ±(5mm+2ppm•D) |
| | Measuring Time | Prism | Fine: 0.3S, Tracking 0.1S |
| Reflectorless | | 0.3-3S | |
| Minimum Reading | | 1mm/0.1mm | |
| Robotic Specification | | | |
| Motorization | Motor Type | DC Servo Motor | |
| | Rotate speed | 45°/s | |
| | Rotation Time F1/F2 | 2.9s | |
| Prism Search | Range | 3-300m | |
| | Scope*4 | Horizontal: 360°; Vertical: ±18° | |
| | Search Time | Typically 3.5s per 90° | |
| Auto Prism Recognition | Range*5 | 3-1200m | |
| | Time | 3-5s | |
| | Search Window | Customized | |
| General Specification | | | |
| Telescope | Image | Erect | |
| | Tube Length | 154mm | |
| | Effective Aperture | 45mm (EDM: 50mm) | |
| | Magnification | 30x | |
| | Resolving Power | 3" | |
| | Field of View | 1°30' | |
| | Minimum Focus | 1.2m | |
| | Reticle Illumination | 5 brightness levels | |
| OS, Interface and Data | Operation System | Android 11 | |
| | Display | 5.5inch, TFT color LCD with LED backlight, touch screen, dual face | |
| | Keyboard | 13 keys with backlight, 4 keys for function | |
| | Processor | MT6833, 8 Core, 2.2GHz | |
| | Data Storage | Internal Memory Plug-in Memory Device | |
| Communication | Interface | Type-C for USB OTG, TF card | |
| | WLAN | RS-232, Bluetooth 5.1 | |
| | SIM Slot | 2.4G/5G/WIFI | |
| | Long-range Remote Control | Micro Sim, 5G Powered by Zigbee, 450m | |
| Levels | Plate Level | 30"/2mm | |
| | Circular Level | 8' | |
| Laser Plummet | Type | Red laser dot, 635nm | |
| | Accuracy | ±1.5mm at 1.5m | |
| Power Supply | Operating Time (20°C) | 4 hours | |
| | Battery | Li-ion rechargeable battery, 5400mAh | |
| Working Environment | Working Temperature | -20°C to +50°C | |
| | Storage Temperature | -40°C to +70°C | |
| | Protection /Humidity | IP55 / 95% non-condensing | |
| Dimension | Size | 217mm*198mm*378mm (without antenna) | |
| | Weight | 7kg (with battery) | |

*1: A built-in rangefinder product equipped with a Class 3R laser has a harmful distance of 1000m (3300ft). Beyond this distance, the laser intensity will be reduced to Class 1.

*2: Standard clear, no haze, overcast situations. Range and accuracy are dependant on atmospheric conditions.

*3: With Kodak Gray Card White Side (90% reflective)

*4/5: For 64mm round prism.

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NS 30

Robotic Total Station



- High accuracy - 1" for angle, 1 + 1ppm for distance
- Long range prism (3500m) and reflectorless (1000m) measurements
- Reliable prism search to 300m
- Auto prism recognition to 1200m
- LocknTrack function
- Hyper Drive, direct motor powered by worm and gear
- Flexible data transfer by USB OTG, TF card and Bluetooth
- Fully robotic control with H6 Plus Controller, up to 450m
- Practical Survey Star onboard



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Version: NS30 1.0

Catches All in One Sight

NS 30

NS 30

The Ultimate One-Man System

Benefit from Zigbee technology, NS30 can be used to connect with your H6 Plus Controller in maximum 450m. Long-range data link offers a flexible and agile remote control for one-man survey system.



Direct Motor by Worm & Gear. Stable and reliable for motorization. Positioning accuracy <math>< 1''</math>



When Prism Search is activated, NS30 enables you to search, recognize and aim a prism in 300m with both versatility and agility.



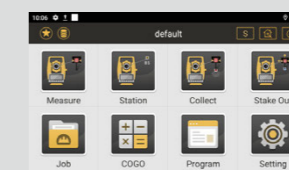
NS30 featuring a powerful algorithm that automatically aim and recognize the prism within the sight of view for 1200m. It can handle every task with ease.



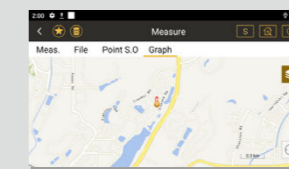
With **LocknTRack**, it easier to lock onto the prism and follow its movements constantly, which is able to eliminate the need for standing around and waiting when collecting data or staking out.



Practical Onboard Software - Survey Star



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



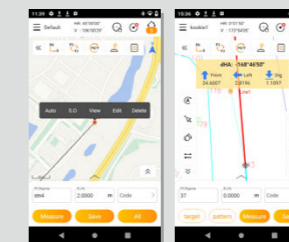
Map-Driven Workflow

It is an interactive function embedded in Survey Star, with visible features.



Not necessary to extract the coordinate from **CAD** files any more. The only thing you need to do is import the CAD files directly to stake out the points.

Flexible Collector Software - Survey Star Pilot



Survey Star Pilot is a powerful and practical field software design for NS30, it enables you to change the settings, collect data and stake out points easily on your controller.



- 1 Zigbee antenna for 450m fully robotic remote control
- 2 Seamless data transfer with Bluetooth 4.1
- 3 Easy access to network - dual nano-sim card and WLAN available
- 4 5.5 inches capacitive touch screen
- 5 Android 11 operating system, 64GB ROM
- 6 Fully keypad for quicker entry
- 7 Waterproof and dustproof IP65 design
- 8 Market-leading 15 hours battery working life and 240 hours stand-by

Ultra Flexible!

Efficient for 3rd Party Developer

Combined with Survey Star Pilot, NS30 offers a flexible workflow. Also it provides the software suite which can be developed by your own requests. Faster and easier to locate points from points to fields by using NS30 robotic total station.

Ultra Fast!

Flexibility Makes It Easy to Start

You just need to carry a prism pole with H6 Plus Controller, then you can visit all the points by only one person. Not necessary to communicate with operator at the instrument, just following the guidance on your controller.