



N1 LASER DUAL-CAMERA GNSS RECEIVER



The N1 is an all-in-one intelligent surveying terminal that combines a laser rangefinder, dual cameras, high-precision GNSS RTK, and a 60° tilt compensator into one compact device. Through its highly integrated multi-sensor fusion design, the N1 truly achieves multiple functions in a single tool, delivering a one-stop field solution that significantly improves operational efficiency in challenging environments.



Laser Technology



Dual-camera(AR Stakeout)



IMU-Based Tilt Compensation
(0 – 60 degrees)



Communication Diversity
(Bluetooth, WiFi, 4G, Radio)



Full Support of
All Global Constellations



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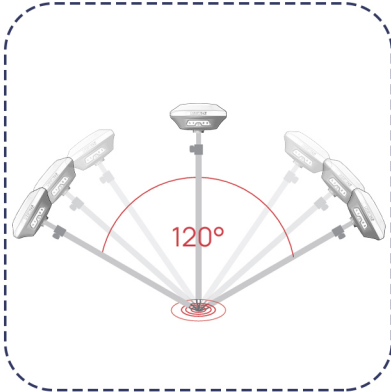
Laser Ranging & Dual-Camera Assistance

Integrated laser ranging function quickly captures precise coordinates and distances of targets up to 25 meters away.



AR Stakeout

Visualize your design plans directly in the real world. Using augmented reality, the N1 overlays digital design points and lines onto the live camera view, guiding you to complete field stakeout with unparalleled intuition and precision.



High-Precision Positioning & Tilt Compensation

The built-in high-precision GNSS RTK module delivers real-time centimeter-level positioning. Integrated 60°tilt compensation technology allows the pole to operate normally at steep angles, significantly improving efficiency in challenging terrains.

GNSS Performance

Channels	1408
BDS	B1I、B2I、B3I、B1C、B2a、B2b
GPS	L1 C/A、L1C、L2P (Y)、L2C、L5
GLONSS	G1、G2、G3
Galileo	E1、E5a、E5b、E6
QZSS	L1/L2/L5
NavIC	L5
SBAS	WAAS、GAGAN、MSAS、EGNOS、SDCM、BDS、HAS
IMU update rate	200 Hz
PPP	B2b & Has
Real time kinematic (RTK)	H:± (8+1×10 ⁻⁶ D) mm V:± (15+1×10 ⁻⁶ D) mm
Static and rapid static	H:± (2.5+0.5×10 ⁻⁶ D) mm V:± (5+0.5×10 ⁻⁶ D) mm
Code differential	H: 0.4 m V: 0.8 m
SBAS	H: 0.8 m V: 0.8 m

GNSS Performance

Storage Capacity	8G
Differential Format	RTCM 3.X
Input	Type C
Operating Time	Operating Time: Up to 10 hours Conditions: With Mobile Station (Network mode) AR, and Laser all enabled

Cameras

Bottom Stakeout Camera

Resolution	2MP
FOV	72°

Side Stakeout Camera

Resolution	2MP
FOV	88°

Laser Ranging Accuracy

Range	Up to 25m
High-accuracy Laser survey	2.5 cm within range 5 m

Port

TNC	Radio Antenna Port
Type-C	Charging & Data
SIM Card Slot	Nano SIM Card

Communication

Bluetooth	Bluetooth 5.0 with EDR and Backward Compatibility; BLE
WIFI	802.11 a/ac/b/g/n
Network	Support LTE-cat4 LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28 LTE TDD: B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: 850/900/1800/1900 MHz
Radio	TX/RX Integrated Transceiver Data Radio TX Power: 1/2 W Frequency Range: 410MHz – 470MHz Protocol: TRIMTALK、TRIMMK3、SOUTH、TRANSEOT、GEOTALK、GEOMK3、SATEL、HITARGET、HZSZ、PCCEOT、PCCEOT_SATEL、PCCFST、PCCFST_ADL、SATEL_ADL