Specifications

Positioning

Channels	1408
GPS	L1C/A,L1C,L2P(Y),L2C,L5
GLONASS	G1,G2,G3
BDS	B1I,B2I,B3I,B1C,B2a,B2b
GALILEO	E1,E5a,E5b,E6
QZSS	L1,L2C,L5,L6
NAVIC(IRNSS)	L5
SBAS	L1C/A
PPP	B2B-PPP	E6-HAS
Data Update Frequency	50Hz
Positioning Frequency	1Hz 2Hz 5Hz 10Hz 20Hz 50Hz
Cold Start Time	<12s
Initialization Time	＜5s
Initialization Confidence	＞99.9%

Measurement Accuracy

Static Mode Accuracy	H:±2.5mm+0.5ppm V:±5.0mm+0.5ppm
Single Point Solution Accuracy	H:1.5m V:2.5m
Differential Solution Accuracy	H:0.4m V:0.8m
RTK Accuracy	H:±8.0mm+1ppm V:±15.0mm+1ppm
Time Accuracy	20ns
Tilt Measurement Accuracy	≤2.5cm within 120°

Power

Battery Life	Static 20h,Rover 16h,Base 10h
Power Supply	Built-in Li-ion 9V/2A MAX18W 3.6V_13200mAh

Physical Properties

Shell Material	Magnesium-Aluminum Alloy
Weight	990g
Dimensions	Φ135*90mm
Button	Power Button
Indicator Lights	Satellite Signal Light, Data Transmission Light, Current Battery Light

Laser - Easy

Type	Class 3R, red
Range	0.05-49.99m By Daylight 0.05-99.99m By Moonlight
Distance Accuracy	2mm @1σ
Tracking Measurement	5-20Hz
Accuracy	2cm within 5m 3cm within 10m

System

Operating System	Linux
Memory	8G
Data Transmission	4G/Bluetooth/WIFI/Radio
Bluetooth	V5.0,BLE
WIFI	802.11a/b/g/n
Radio Power	1W
Radio Frequency	410-470MHz
Air Baud Rate	19200，9600，4800
Supported Protocols	Gintec Work,TrimTalk450s(T), TrimMark III, SOUTH, PCC-EOT, Hi-target, Satel, Farlink, etc.
Supported Languages	Chinese, English,Polish, Turkish, Korean, Indonesian, Spanish, Telugu, Russian, etc.
Data formats	RTCM2.x,RTCM3.x, CMR input/output,RINEX2.11,3.02, NMEA0183 output NTRIP Client, NTRIP Caster

Camera

Number of Lenses	2
Front Lens Field of View	83.4°
Front Sensor Pixel	2 Mega Pixel
Front Camera Focal Length	5m
Front Sensor Resolution	1920*1080
Bottom Lens Field of View	83.4°
Bottom Sensor Pixel	2 Mega Pixel
Bottom Camera Focal Length	2m
Bottom Sensor Resolution	1920*1080

Environmental Adaptability

Operating Temperature	-30℃~+65℃
Storage Temperature	-40℃~+80℃
Water and Dust Resistance Rating	IP68
Operating Humidity	99.9% non-condensing

GINTEC
TAKE POSITION ASSURED

G50 Laser
GNSS Receiver

G-FIX

120°

AR+

REACH THE UNREACHABLE
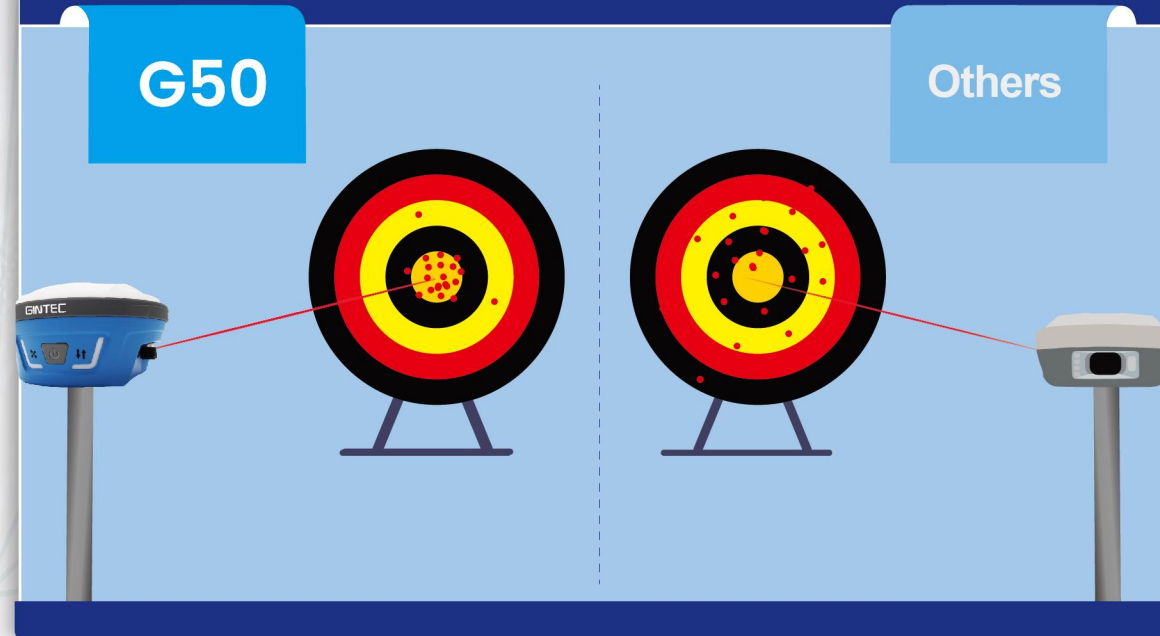G50 Laser RTK, Precise Measurement, Your Choice Of Confidence.
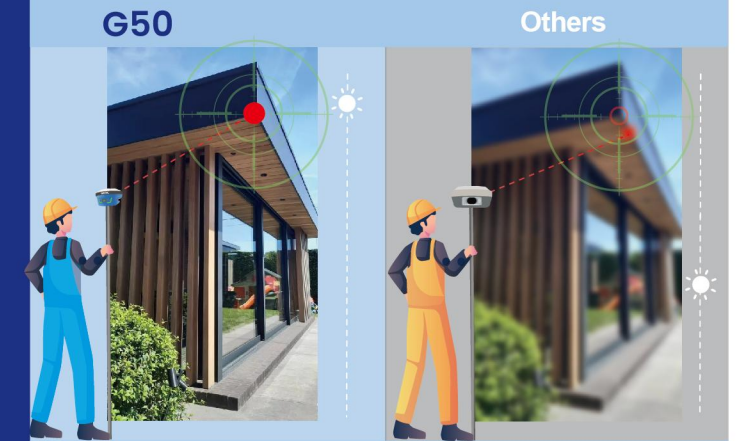
Reach The Unreachable

Laser-Easy

① Higher Laser Positioning Accuracy and Stability

G50 exhibits small data variation after multiple measurements under the same conditions. It stands out itself by adopting Mileseey's leading edge EDM laser unit & unique Laser-Easy laser ranging algorithm, ensuring both the accuracy and stability of the data.
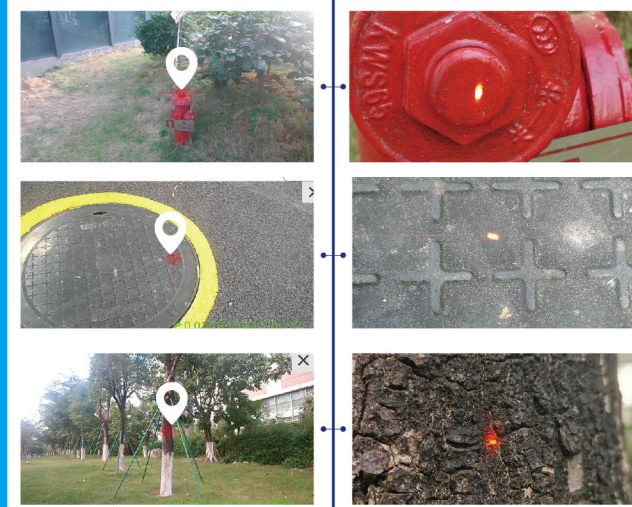
G50

Others

② Clearer & Brighter Laser Spot

G50   Others

Emitting Class 3R red laser, G50 targets the objects in a brighter and clearer laser point, achieving more efficient laser measurement.
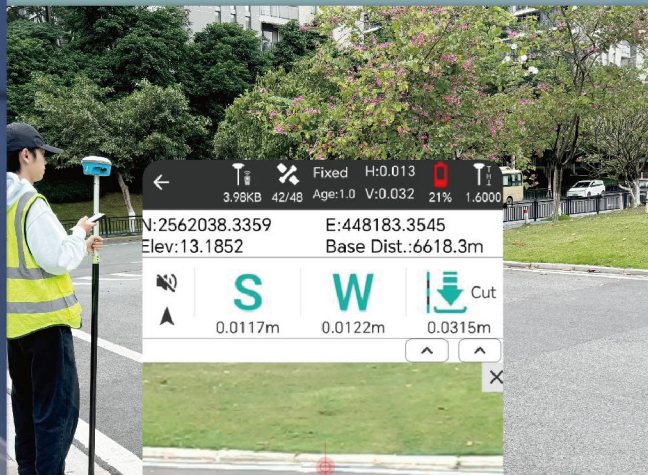
③ Measure any Objects Accurately
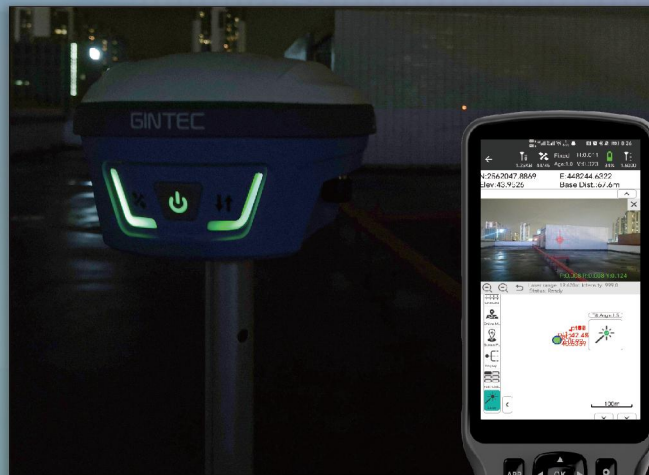
Measurement Image   Real Photo

With higher-intensity laser emission and superior reflectivity, G50 maintains stable ranging results in measuring objects, regardless of their colors and materials.
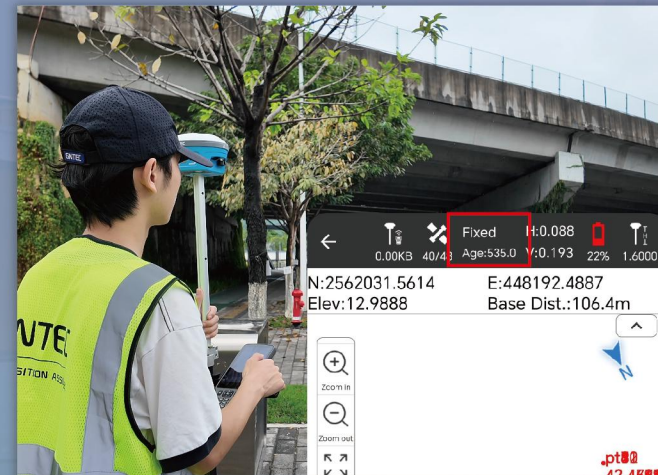
Excellent Features

Laser Staking-out
- By integrating the latest IMU, algorithms, and EDM characteristics, G50 supports real-time laser staking-out for difficult measurement points, ensuring accuracy, efficiency and ease of use.

HD Stellar Camera
- Adaptive exposure adjustment under different lighting conditions + IR Filter, it is more suitable for dark vision usage, effectively filtering infrared light and significantly improving nighttime shooting results.

G-FIX Correction Outage Technology
- Extending FIX solution up to 10mins
- Reducing downtime waiting to re-establish RTK corrections

Up To 120° Tilt Within 2.5cm Accuracy
- The use of fourth-generation measurement technology ensures the G50 can still get fixed for tilt measurement work at even 120°.

GALILEO HAS/BDS PPP Service Supported
- HAS provides free high-precision PPP correction services on the Galileo E6-B signal to improve real-time user positioning performance.
- BDS PPP provides free BDS high precision PPP correction services within its coverage area.

Augmented Reality (AR)
- Cutting-edge dual-camera system significantly enhances accuracy and guidance during measurement and staking out processes.

CreateYours

self-developed, quick-response, android

- **PROFESSIONAL**
- **USER-FRIENDLY**
- **RICH FUNCTION MODULE**
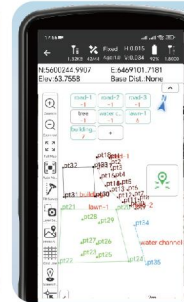- **SURVEY AND MAPPING**
- **HANDHELD ANDROID APPLICATION**

Multiple Base Map Options: Google Map, WMS CAD ......

Pro+ Laser Survey Mode Specifically Designed for G50

Auto-Drawing Line/Polygon while Collecting Points

Powerful CAD Engine and Polygon Tools

DSM-based Terrain Staking

Easy to Conduct Road Design and Staking

Data Sharing among Team, One Click Easy Transmission

P3 Handheld Controller

Trusted by Thousands: Join Our Users in Experiencing Exceptional Measurement Solutions!

A durable and practical tool for surveying and mapping. With IP68 industrial-grade waterproofing, dustproofing, and shockproofing. Its 5.5-inch FHD display, 800 Nits screen brightness, and 9000mAh battery provide clear visuals and up to 20 hours of continuous operation. Experience the power to conquer any terrain with precision and efficiency.

KEY FEATURES

5.5 Inch
High-Brightness Display

1080*1920
Resolution

8 Cores
Processors

4+64G
RAM+ROM

800 Nits
Sunlight-readable with enhanced visual experience

Corning Gen3
Excellent strength and durability

9000mAh
High-Capacity Battery