# **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%                     |

# Meas

### 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° |
|                                |                    |



# Battery

**GINTEC** 

| Battery Life | Static 20h,Rover 16h,Base 10h |
|--------------|-------------------------------|
| Power Supply | 9V/2A MAX18W 3.6V_13600mAh    |



# Physical Properties

| Shell Material   | Magnesium-Aluminum Alloy   |
|------------------|--|
| Weight           | 990g   |
| Dimensions       | Ф135*90mm  |
| Button           | Power Button   |
| Indicator Lights | Satellite Signal Light, Data Transmission Light, Current Battery Light |



# Laser - Easy

| Туре                 | Class 2, red  |
|----------------------|---|
| Range                | 0.05-49.99m By Daylight<br>0.05-99.99m By Moonlight |
| Distance Accuracy    | 2mm @1σ   |
| Tracking Measurement | 5-20Hz  |
| Accuracy             | 2cm within 5m<br>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),<br>TrimMark III, SOUTH, PCC-EOT,<br>Hi-target, Satel, Farlink, etc. |
| Supported Languages | Chinese, English,Polish,<br>Turkish, Korean, Indonesian,<br>Spanish, Telugu, Russian, etc.       |
|                     |  |



### 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 °C~+80 °C        |
| Water and Dust Resistance Rating | IP68                 |
| Operating Humidity               | 99.9% non-condensing |

### \* LASER RADIATION: AVOID DIRECT EYE EXPOSURE



TEL: 8620-82514956 | Website: www.gintec.cn | Email: overseas@gintec.cn ADD: Room401-403, Building A02, No. 83, Kaiyuan Avenue, Huangpu District, Guangzhou, Guangdong, China





# REACH THE UNREACHABLE

G50 Laser RTK, Precise Measurement, Your Choice Of Confidence.

# Reach The Unreachable

Laser-Easy



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





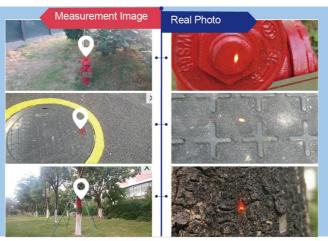
**Others** 



# Clearer & Brighter Laser Spot

Emitting Class 2 red laser, G50 targets the objects in a brighter and clearer laser point, achieving more efficient laser measurement.







# Measure any Objects

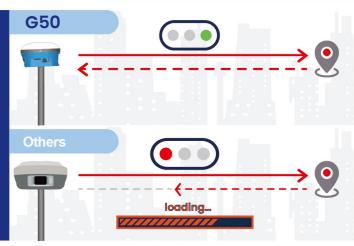
With higher-intensity laser emission and superior reflectivity, G50 maintains stable ranging results in measuring objects, regardless of their colors and materials.



# Valid Real-time Data

# Collection

Continuously collecting and transmitting laser data at up to 20Hz, coupled with supporting of CY software, G50 implements real-time measurement, greatly shorten the acquisition time.



# Other 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.



# 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° measurement angles



# **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.



# 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.



# **G-FIX Correction Outage Technology**

- Extending FIX solution up to 10mins
- Reducing downtime waiting to re-establish RTK corrections



# **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 within Team, One Click Easy Transmission

# **Handheld Controller** Trusted by Thousands: Join Our Users in Experiencing **Exceptional Measurement Solutions!**

A durable and practical tool for surveying and mapping. With IP67 industrial-grade waterproofing, dustproofing, and shockproofing. Its 5.5-inch FHD display, 800 Nits screen brightness, and 9000mAh battery provide clear visuals and over 18 hours of continuous operation. Experience the power to conquer any terrain with precision and efficiency.

# **KEY FEATURES**













Sunlight-readable with enhanced visual experience



Excellent strength and durability





