

# *GNSS RTK*

*Precise measurement*



**LCD screen**

**Laser 100m**



**MAGIC L**  
LASER



### Color LCD screen for full control

1.39" color LCD screen that clearly displays location information, number of satellites, RTK solution status, and base station configuration. It allows monitoring and configuring the device directly without the need for a controller



### Long-range laser (100 m)

Long-range green laser (up to 100 m) that allows obtaining X, Y, Z coordinates of inaccessible points quickly and accurately. This feature facilitates complex surveys in difficult or hazardous terrain, improving efficiency and safety in the field



### Multi-constellation and multi-frequency

Allows simultaneous tracking of multiple constellations and frequencies, improving satellite availability and positioning robustness



### Anti-interference technology

60 dB narrowband interference suppression. Continuous operation in challenging electromagnetic environments



### PPP support

Precise positioning without a base, via connection to Galileo HAS or Beidou B2b



### 5th-generation IMU

High-performance inertial unit with immediate initialization, requiring no calibration at startup. Allows operation with inclinations of up to 120°



### Stakeout with Augmented Reality (AR)

Augmented Reality (AR) via camera, allowing points and lines to be viewed directly over the real terrain image on the controller. Enables more intuitive and faster positioning.



### Integrated dual radio, maximum connectivity

Combines multi-protocol Tx/Rx radio for transmitting and receiving RTK corrections with long-range LoRa radio for robust and efficient communications



### Extended battery life for continuous operation

Long-lasting battery with up to 18 hours in RTK Rover mode, enabling full workdays without interruptions. Ensures continuous and reliable operation, reducing the need for recharging and maximizing field productivity



### Continuous field charging

Allows direct charging via power bank while in operation. This hot-swappable external power capability significantly extends system autonomy, enabling prolonged work sessions without interrupting measurements



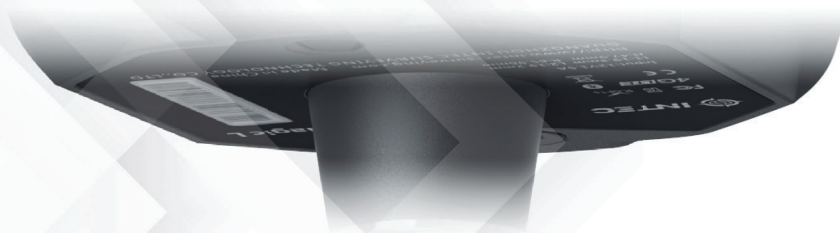
### Full integration with field software

Fully integrated with InPad software, allowing access to and utilization of all its advanced surveying and GNSS features. This integration ensures complete control of the receiver and maximum field efficiency, from surveys to stakeouts and project management.



### AP+Client (Wi-Fi Hotspot)

Allows connection to the receiver by sharing Wi-Fi from the user's phone, maintaining all device functionalities, including the cameras, without the need to insert any SIM card



# Specifications 1

## GNSS Performance

Channels	1408 / 1808 (upgradable)
Satelites Tracking	GPS:L1C/A/L2P(Y)/L2C/L5 GLONASS:L1/L2 BDS:B1I/B2I/B3I/BIC/B2a/B2b Galileo:E1/E5a/E5b/E6 QZSS:L1/L2/L5/L6 SBAS:L1
Positioning rate	Up to 50Hz
Operation system	Linux
Initialization time	<5s(Typical)
Initialization Reliability	99,99%
Static Horizontal Accuracy	$\pm(2.5\text{mm}+0.5 \times 10^{-6} \times \text{D})$
Static vertical Accuracy	$\pm(5\text{mm}+0.5 \times 10^{-6} \times \text{D})$
RTK Horizontal Accuracy	$\pm(8\text{mm}+1.0 \times 10^{-6} \times \text{D})$
RTK vertical Accuracy	$\pm(15\text{mm}+1.0 \times 10^{-6} \times \text{D})$

## Laser Tilt Survey

Laser Survey	Supported ,3D error $0.008+0.005 \times \text{D}$ (tilt angle $\leq 30^\circ$ )
Laser Range	100m

## LCD

Size	1.39 inch
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## IMU Sensor

IMU	Supported
Accuracy	< 2cm (within 60°)
Tile angle	0°~120°

## Specifications 2

Data Output	
Correction Data	RTCM2.X、RTCM3.X
GPS data	NMEA 0183s RJK, Binary
Function Configuration	
Tilt Survey	supported
PPK Survey	supported
Buzzer	supported
NFC	supported
Size	132*132*109mm
Feature	
Weight	0.85 kg
Operating Temperature	-45°C~+75°C
Storage Temperature	-55°C~+85°C
Water/Dust Proof	IP67
Shock Resistance Grade	IK08
Shock	Survive 1.8m drop
Battery Capacity	7.2V、6600mAh
Static Data Recording	
Data Storage	32G
Static Data Format	TXT

## Specifications 3

Electrical	
Working time	18 hours with rover CORS work mode 7.5 hours with base station work mode
External Power	USB Type-C power,power bank supported
I/O Port	1*USB Type C(power supply and charge) 1*TNC radio antenna port 1*NanoSIM card slot 1*Power key
Communication	
Wireless Communication	Supports Buletooth,controller 4G,WIFI,bulit-in 4G-LTE,WEB UI LTE-TDD B38/B40/B41 LTE-FDD B1/B3/B5/B7/B8/B20 UMTS/HSPA+ B1/B8 GSM/GPRS/EDGE 900/1800 MHz
Radio Transmit Power	1.5 W
Long Range radio(Lora)	Supported
Internal Radio Frequency	410-470MHZ
Protocol	TRIMTALK, TRIMTALK 450S, TRIMMARK III, SATEL-4FSK, SOUTH (9600), SOUTH (19200), LoRa
Camera	
Function	5M&5M double high-definition cameras With a large viewing angle that supports real-life AR stakeout