

Best choice, Brightest price

**KOLIDA GNSS**

**SPECIFICATIONS**

Surveying Performance	
Channel	220 Channels
Signal Tracking	BDS B1, B2, B3 GPS L1C/A, L1C, L2C, L2E, L5 GLONASS L1C/A, L1P, L2C/A, L2P, L3 SBAS L1C/A, L5 (Just for the satellites supporting L5) Galileo GIOVE-A, GIOVE-B, E1, E5A, E5B QZSS, WAAS, MSAS, EGNOS, GAGAN, SBAS
GNSS Features	Positioning output rate: 1Hz~50Hz Initialization time: < 10s Initialization reliability: >99.99%
Positioning Precision	
Code Differential GNSS Positioning	Horizontal: ±0.25 m + 1 ppm RMS Vertical: ±0.50 m + 1 ppm RMS SBAS positioning accuracy: typically<5m 3DRMS RMS
Static GNSS Surveying	Horizontal: ±2.5 mm + 0.5 ppm RMS Vertical: ±5 mm + 0.5 ppm RMS
Real-Time Kinematic Surveying (Baseline<30km)	Horizontal: ±8 mm + 1 ppm RMS Vertical: ±15 mm + 1 ppm RMS
Network RTK	Horizontal: ±8 mm + 0.5 ppm RMS Vertical: ±15 mm + 0.5 ppm RMS RTK initialization time: 2~8s
Physical	
Dimension	13.4cm x 11.8cm
Weight	1.02kg (including installed battery)
Material	Magnesium aluminum alloy shell
Environmental	
Operating	-45°C ~ +60°C
Storage	-55°C ~ +85°C
Humidity	Non-condensing
Waterproof/Dustproof	IP67 standard, protected from long time immersion to depth of 1m IP67 standard, fully protected against blowing dust
Shock and Vibration	Not operating: Withstand 2 meters pole drop onto the cement ground naturally While: Withstand 40G 10 milliseconds sawtooth wave impact test
Electrical	
Power Consumption	2W
Battery	Rechargeable, removable Lithium-ion battery
Battery Life	Single battery: 7h (static mode) 5h (internal UHF base mode) 6h (rover mode)
Communications and Data Storage	
I/O Port	5PIN LEMO external power port + RS232 7PIN LEMO RS232 + USB 1 network/radio data link antenna port SIM card slot
Wireless Modem	Integrated internal radio receiver and transmitter 0.5W/2W External radio transmitter 5W/25W
Working frequency	410-470MHz
Communication protocol	TrimTalk450s, TrimMark3, PCC EOT, KOLIDA
Cellular Mobile Network	WCDMA3.5G network communication module, GPRS/EDGE compatible, CDMA2000/EVDO 3G optional
Double Module Bluetooth	BLEBluetooth 4.0 standard, support for android, ios cellphone connection Bluetooth 2.1 + EDR standard
NFC Communication (Optional)	Realizing close range (shorter than 10cm) automatic pair between K5 PLUS and controller (controller equipped NFC wireless communication module needed)
Data Storage/Transmission	4GB internal storage, more than 3 years raw observation data (about 1.4M/day), based on recording from 14 satellites Plug and play mode of USB data transmission
Data Format	Differential data format: CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 GPS output data format: NMEA 0183, PJK plane coordinates, binary code Network model support: VRS, FKP, MAC, supporting NTRIP protocol
Inertial Sensing System (Optional)	
Tilt Survey	Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle of the centering rod
Electronic Bubble	Controller software display electronic bubble, checking leveling status of the centering rod real time
User Interaction	
Buttons	One-button operation, visual operation, convenient and efficient



**K5 Plus**  
A Next-Generation GNSS Receiver

- GPS+GLONASS+BEIDOU+GALILEO
- Bluetooth 4.0 Connectivity/ built-in NFC Chip
- Tilt Compensation/ Electronic Bubble
- Full Metal Shell, IP67 Proof, Total Weight 1KG

**KOLIDA**  
KOLIDA INSTRUMENT

**GUANGDONG KOLIDA INSTRUMENT CO., LTD.**  
Add: 2/F, Surveying & Mapping Building (He Tian Building),NO.24-26, Ke Yun Road, Guangzhou 510665, China  
Tel: +86-20-85542075 Fax: +86-20-85542136  
E-mail: export@kolidainstrument.com http://www.kolidainstrument.com

# K5 PLUS A Next-Generation GNSS Receiver

## Key Features

### World-Leading Positioning Technology

Equipped with the most advanced GNSS positioning technology, K5 PLUS will provide you an awesome working experience.

Featuring an ultra-powerful GNSS mainboard, K5 PLUS can track and process signals from GPS, GLONASS, BEIDOU, GALILEO and SBAS systems. With this superior multi-Constellation compatibility, the satellite availability, signal acquiring speed are greatly improved, the waiting time has been shortened and the positioning accuracy (RTK) is up to 8mm+ 1ppm in horizontal and 15mm+ 1PPM in vertical.

### Versatility and Flexibility

Every unit of K5 PLUS can work as base receiver or rover receiver. The built-in transceiving radio can transmit signal to 1-5km away even farther. The integrated 3.5G/GPRS module enables seamless real time connection with CORS networks. Bluetooth 4.0 technology supports the connection to IOS, Android cell phone and all kinds of data collector.

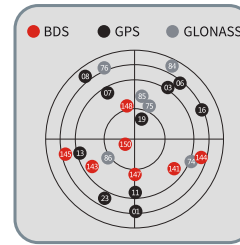
A newly-designed Smart Power Management program can reduce energy spill and extends working hours. Smart Voice Prompt program can guide your operation and system trouble-shooting.

### Smaller but Stronger

K5 PLUS is one of the smallest GNSS receivers in the world, the diameter of the top end is only 134mm, the height of receiver is 118mm, total volume is 1.02L and it weighs only 1KG.

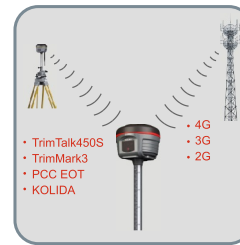
Magnesium alloy materials create an extremely rugged, compact and light machine body for K5 PLUS. The anti-impact ability, shock absorbing ability and heat dissipation ability are greatly improved.

The whole-seal design brings K5 PLUS an IP 67 level industrial class proof ability, makes the receiver withstand all kinds of stresses from harsh environment.



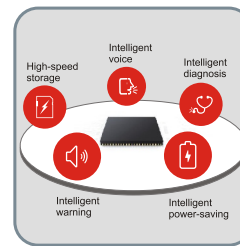
### Full satellite constellations support

Equipped with most advanced GNSS boards, KOLIDA K5 PLUS system can track most signal from all kinds of running satellite constellation, especially support B1, B2 and B3 signal from BeiDou, also is able to get position result with only BeiDou signal.



### Advanced data-link module

Integrated with new and excellent datalink system, KOLIDA K5 PLUS is compatible with current radio protocols in the market, also supports all kinds of network types to access CORS seamlessly.



### Intelligent and open platform

A new and smart platform makes the whole system works faster and more stable, the power consumption is significantly reduced. The status of each parts can be monitored in real time.



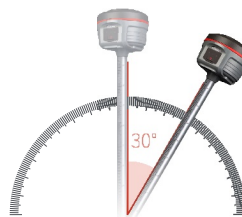
### Extremely small

KOLIDA K5 PLUS, with innovative design, the size of the RTK receiver is extremely small and the weight is only 1kg. With Multi-layer shielding technology, we solve the Interference problem even in the very small size, which ensure the accuracy and stability of the RTK receiver.

## New Features

### Tilt survey

Tilt Survey function is to help surveyors to directly measure a corner or edge of a object. Within the tilt range of 30 degrees, Tilt Sensor can correct the measuring result according to tilt angle and direction.



### Electronic bubble calibration

Electronic bubble function is designed to help surveyors to make centering easier and faster. While measuring a point, users don't need to observe physical bubble anymore but controller screen only.



### NFC function

The internal NFC module can make the complicated bluetooth communication more simple and easier.



### Easy to carry

A newly designed carrying case is provided with K5 PLUS, it is thick but light, can sufficiently prevent the receiver from damaging on inadvertent collision. The total weight of receiver with the new design soft bag is 30% lighter than before.



## Three Data Collectors Selectable



### S10 Handheld Controller

- 20 channels all-in-view Tracking, L1(C/A)
- SiRF starIII GPS Module
- Integrated 3MP Camera
- Mobile phone functions
- Large storage up to 8G
- Transflective Sunlight Readable Display
- 3G GPRS Module



### Getac PS336 Lite

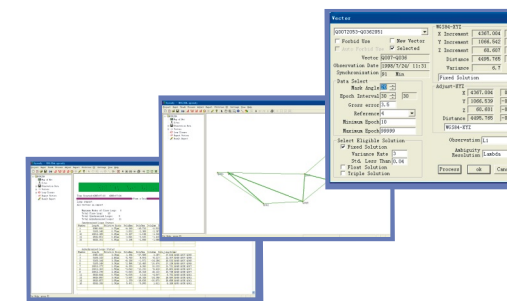
- Windows Mobile 6.5
- Marvell PXA310 1GBHZ CPU
- MIL-STD-810G and IP68 Protection
- 3.72V, 5600mAh extra long Battery life



### Getac PS336 Premium

- Windows Mobile 6.5
- Marvell PXA310 1GBHZ CPU
- MIL-STD-810G and IP68 Protection
- 3.72V, 5600mAh extra long Battery life
- With 3G module/ GPS/ Camera/ Ecompass/ G-sensor

## Post-processing Software



### Post-processing software: KOLIDA GNSS Processor

- Fast Processing and clear Display
- Transformable to RINEX format
- Full options for result Export
- Powerful baseline settings
- Manually edit and filter satellite data for best result

## Field Software



### KOLIDA Engineering Star3.0

- Engineering Star3.0 is the most welcomed Field Software in China. Even a novice can do all complex GNSS survey with EStar3.0 by only six buttons on one screen.
- At any time, you can check your hardware, software status, RTK working mode and switch screen freely.
  - Easy to handle multiple RTK surveying with powerful, but friendly user interface.
  - Support numerous file formats in export/import.



Field Genius is a powerful survey data collection software from Canada. Advanced Roading, Surfacing, Slope Staking, Code Free Linework, Smart Points and GPS support and Live Graphics make FieldGenius the choice of organizations that value productivity. Multi-language is available. (Need to purchase individually)

