SPECIFICATIONS

Surveying Performance	
Channel	555 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 L1 C/A, L1C, L2C, L5, LEX
	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	±0.25 m
Static GNSS Surveying	SBAS positioning accuracy: typically<5m 3DRMS RMS
	Horizontal: ±2.5 mm + 0.5 ppm RMS
	Vertical: ±3.5mm + 0.4 ppm RMS
Real-Time Kinematic Surveying (Baseline<30km)	Horizontal: ±8 mm + 1 ppm RMS
	Vertical: ±15 mm + 1 ppm RMS
	Horizontal: ±8 mm + 0.5 ppm RMS
Network RTK	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℃ ~ +65℃
Storage	-55℃~ +85℃
Humidity	100% proof
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

KOLIDA GNSS

K10
A Next-Generation GNSS Receiver

ҰGPS+GLONASS+BEIDOU+GALILEO

ҰBluetooth 4.0 Connectivity/ built-in NFC Chip

ҰTilt Compensation/ Electronic Bubble

ҰFull Metal Shell, IP67 Proof, Total Weight 1KG

KOLIDA
Professional's Choice

GUANGDONG KOLIDA INSTRUMENT CO., LTD.

K10 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, GALIEO 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.
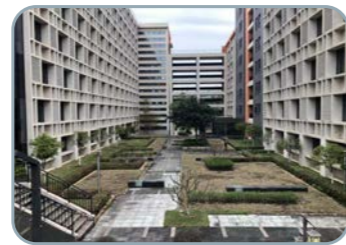
A newly-designed Smart Power Management program can reduce energy spill and extends working hours. Smart Voice Prompt program can guide your operation and system trouble-shooting.

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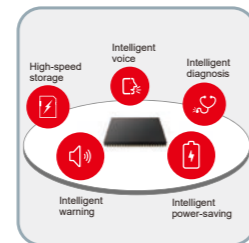
Magnesium alloy materials create an extremely rugged, compact and light machine body for K5 PLUS. The anti-impact ability, shock absorbing ability and heat dissipation ability are greatly improved.

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.

Advanced data-link module

- 4G
- 3G
- 2G
- TrimTalk450S
- TrimMark3
- PCC EOT
- KOLIDA

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

High-speed storage | Intelligent voice | Intelligent diagnosis | Intelligent warning | Intelligent power-saving

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

13.4cm
11.8cm
1 kg

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

30°

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.

NFC function

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

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.

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.

Data Collector. Simply Trustable

T17N
- Windows Mobile 6.5
- 1Ghz CPU, RAM 512MB
- 1GB ROM, Extension to 32GB
- 3.7V, 6500mAh removable Li-ion
- 3.7 Inch, 480X640VGA
- WCDMA
- Include EGSTAR3.0

H3PLUS
- Android 6.0
- Quad-core 1.3GHz CPU, 2GB RAM
- 4.3 Inches, WVGA 800X480dpi
- 8 megapixel camera with auto focus
- 6500mAh, up to 10Hours
- Dual SIM Card
- 4G FDD TDD network, 3G WCDMA
- GPS\GLONASS\SBAS\A-GPS
- Include EGSTAR

New app. New Productivity
SurvX Android

Windows CE data controller is too old technology? No problem.
Simply download SurvX App on your smart phone or tablet.
Enjoy the smooth operation of Android platform !

Seamless Connection
- NFC
- Saving-Time Bluetooth Search
- Auto Connection

Rich & Practical Programs
- CAD function & Line work
- 3D display mode
- Road & Power line program

Intuitive interactive design
- Reducing mistakenly touching
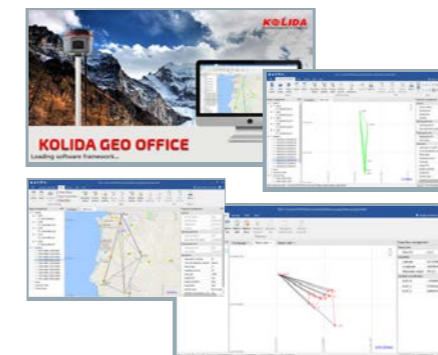- User define program menu
- Signal strength graphic display

Creativity
- Saving & Sharing coordinate system by QR code
- Data recovery & Encryption function
- Support Google map and other base map

Post-processing SW. Free of Charge

KOLIDA GEO Office
Integrates static data processing and kinematic data adjustment

Intelligent
- Antenna manager with popular receiver types.
- Fast processing and clear display
- Manually edit and filter satellite data for best result
- Update online.

Versatile
- Compatible with numerous data format.
- Export abundant types of report.
- Transformable to RINEX format