

SPECIFICATIONS

GNSS Features		Communications	
Channels	1598	I/O Port	<b>4G SIM Card Slot</b>
GPS	L1, L1C, L1C/A, L2C, L2P(Y), L5		5-PIN LEMO interface (external power port + RS232)
GLONASS	G1, G2, G3		Type-C interface
BDS	B1I, B2I, B3I, B1C, B2a, B2b		(charge + OTG+ Ethernet)
GALILEO	E1, E5a, E5b, E6, AltBOC*		UHF antenna interface
SBAS	L1*	Internal UHF	Radio receiver and transmitter, repeater function
IRNSS	L5*	Frequency Range	410-470MHz
QZSS	L1, L2C, L5*	Communication Protocol	Farlink, Farlink Pro, Trimtalk, SOUTH, Satel
MSS L-Band*	BDS PPP & Galileo HAS	Communication Range	Typically 5-8km with Farlink protocol, up to 15km
Positioning Output Rate	1Hz~20Hz	Bluetooth	Bluetooth 3.0/4.1 standard, Bluetooth 2.1 + EDR
Initialization Time	< 10s	NFC Communication	Support
Initialization Reliability	>99.99%	Modem	802.11 b/g/n standard
Positioning Precision		Data Storage/Transmission	
Code Differential Positioning	Horizontal: 0.25 m + 1 ppm RMS Vertical: 0.50 m + 1 ppm RMS	Storage	4GB SSD internal storage, extendable up to 64GB Support external USB storage (OTG)
GNSS Static	Horizontal: 2.5 mm + 0.5 ppm RMS Vertical: 3.5 mm + 0.5 ppm RMS	Data transmission	The customizable sample interval is up to 20Hz
Static (Long Observation)	Horizontal: 2.5 mm + 0.1 ppm RMS Vertical: 3 mm + 0.4 ppm RMS		Plug and play mode of USB data transmission Supports FTP/HTTP data download
Rapid Static	Horizontal: 2.5 mm + 0.5 ppm RMS Vertical: 5 mm + 0.5 ppm RMS	Data format	Static data format: STH, Rinex2.01, Rinex3.02 and etc. Differential data format: RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 GPS output data format: NMEA 0183, PJK plane coordinate, Binary code Network model support: VRS, FKP, MAC, fully support NTRIP protocol
PPK	Horizontal: 3 mm + 1 ppm RMS Vertical: 5 mm + 1 ppm RMS		
RTK(UHF)	Horizontal: 8 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS		
RTK(NTRIP)	Horizontal: 8 mm + 0.5 ppm RMS Vertical: 15 mm + 0.5 ppm RMS		
SBAS Positioning	Typically<5m 3DRMS	Sensors	
RTK Initialization Time	2~8s	IMU	Built-in IMU module, calibration-free, 60°
IMU Tilt Angle	0°~60°	Electronic bubble	Controller software can display electronic bubble, checking leveling status of the carbon pole in real-time
		Thermometer	Built-in thermometer sensor, adopting intelligent temperature control technology, monitoring and adjusting the receiver temperature
Hardware Performance		User Interaction	
Dimension	135mm(W) ×135mm(L) × 83mm(H)	Operating system	Linux
Weight	900g (battery included)	Buttons	Single button
Material	Magnesium aluminum alloy shell	Indicators	Bluetooth, satellites, data, charging and power indicators
Operating Temperature	-45℃~+75℃	Web interaction	With access to Web UI via WiFi or USB connection, users can monitor the receiver status and change the configurations
Storage Temperature	-55℃~+85℃		
Humidity	100% Non-condensing	Voice guidance	Chinese/English/Korean/Spanish/Portuguese/Russian /Turkish/French/Italian
Waterproof/Dustproof	IP68 standard, protected from long time immersion to depth of 1m	Secondary development	Provides secondary development package, and opens the OpenSIC observation data format and interaction interface definition
	IP68 standard, fully protected against blowing dust	Cloud service	The powerful cloud platform provides online services like remote management, firmware updates, online registers, etc.
Shock/Vibration	Withstand 2 meters pole drop onto the cement ground naturally		
Power Supply	6-28V DC, overvoltage protection		
Battery	7.2V, 6800mAh rechargeable Lithium-ion battery		
Battery Life	15h (rover bluetooth mode)		
*Reserve for future upgrade. Remarks: Measurement accuracy and operation range might vary due to atmospheric conditions, signal multipath, obstructions, observation time, temperature, signal geometry and number of tracked satellites. Specifications subject to change without prior notice.			

K2 GNSS Receiver



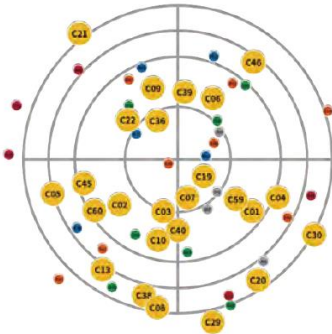
K2 is designed to enhance your performance in the field survey and to provide the most reliable positioning result.

It integrates a 1598 channels world leading GNSS positioning engine, a high precision IMU, a patented-designed Farlink UHF radio, and 4G, Bluetooth, wifi... all state-of-art technologies are there to ensure you an excellent working experience.

Key Features

Quick and Reliable Fixed Solution

With the high-gain GNSS antenna of our latest design in 2025, the usability of Glonass & Galileo satellites is greatly improved, so even in harsh environment K2 still is able to track more satellite than other receivers and deliver centimeter accuracy positioning result in few seconds.



Work Anytime, Anywhere with L-Band

By receiving correction delivered directly from L-band satellites, K2 allows you to achieve 10 to 20 centimeter-level accuracy with only one rover on hand when base receiver or CORS service is not accessible in remote areas. This function is based on Galileo HAS and BDS PPP, please apply the registration code from local distributors.

Powerful and Durable Radio Connectivity

K2 features our patented-designed Farlink radio technology. When it works as an UHF base station K2 is able to transmit correction data farther than others, in good condition the working range can be 10 to 15 km. In 2025, the latest protocol Farlink Pro is added as a new option, for user to cope with challenging environment.

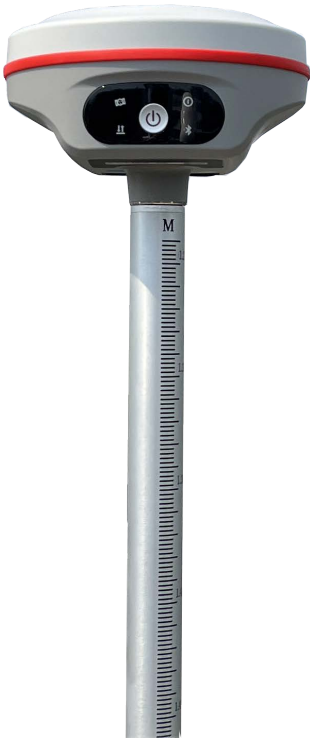
Efficient IMU Tilt Survey

K2's IMU sensor is almost all-time available. When surveyor rotate the pole while walking, or changing the attitude of the receiver, the availability status won't be easily lost. The IMU is calibrate-free.

Superior Endurance & Ruggedness

The newly developed power management system allows K2 to work up to 15-18 hours as rover and can be recharged by a type-C connector.

The shock-resistant frame, water-proof frame all have been enhanced, now the overall proof level is IP68.

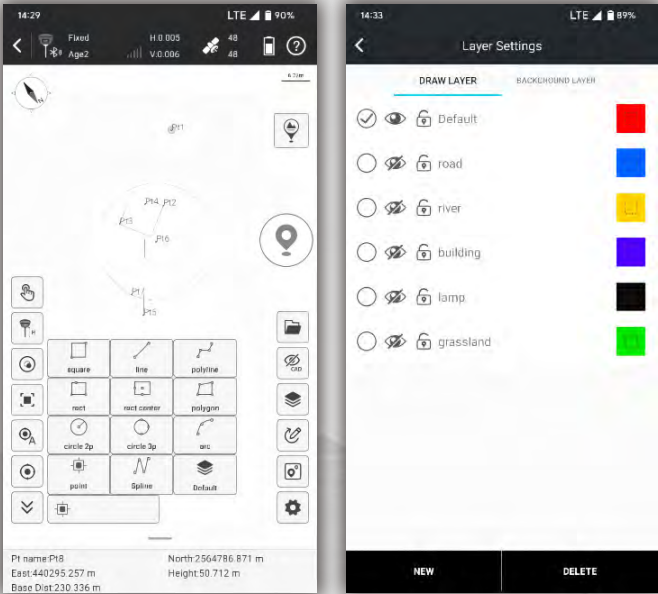




# Ksurvey APP

## Field Data Collection & Mapping: The Most Advanced is Here

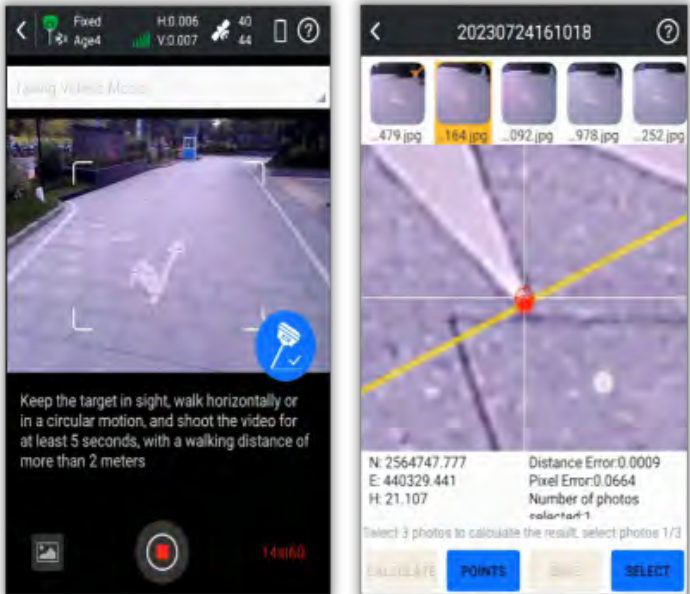
### Measure & Draw : Save Time in Field work and Office



This feature allows you to draw the result map while completing point measurements.

- Before measuring points, users can choose the shape of the target object to be measured from 11 preset figures. The software will guide you to measure points in an order and automatically connect lines and complete the drawing of the figure.
- The .dxf or .dwg maps created on-site can be used directly in office work.
- Users can assign measured objects with different attributes, to different layers for measurement and management, making no mistakes.

### Visual Positioning : Industry-Leading Non-Contact Measurement Technology

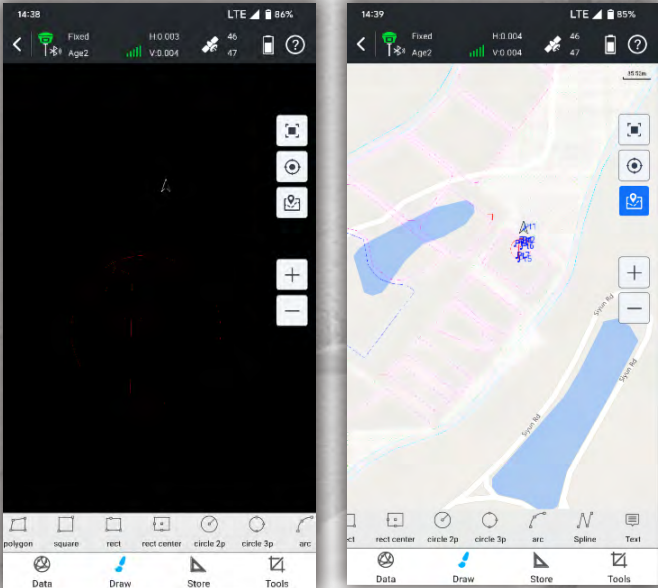


Photogrammetry Measurements can be conducted by taking pictures or videos. Coordinates of all points in the photos can be acquired.

- Now, target points that are inaccessible due to dangerous environments, poor satellite signals, or impassable terrain can be measured remotely.
- The captured image data can also be used with software like SGO, Pixel4D, DJI Terra, and CC for 3D modeling.
- Image measurement data can also be combined with drone measurement data to address issues of blurriness and deformation in ground data models collected by drones.

*(This function only works with the receiver models that have front-facing camera or dual-cameras)*

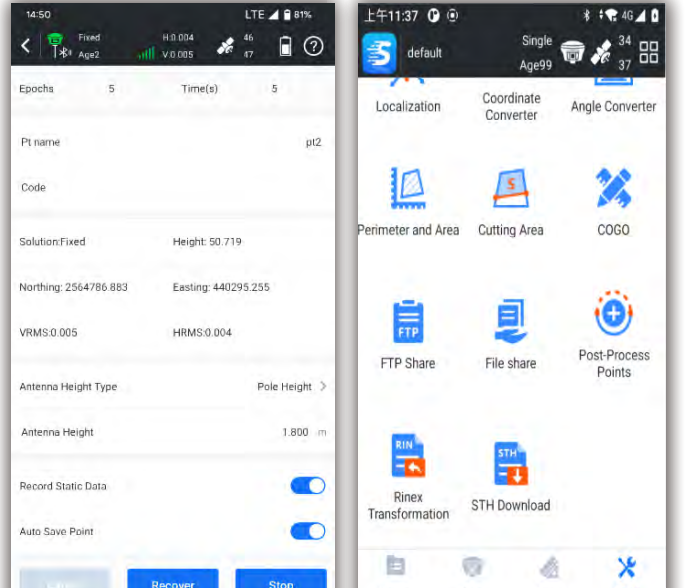
### CAD Draw : Drafting without a PC



Select points to form a polygon, and directly identify the area division points for the surveyor to stake out. There is no more need for the user to guess a position to measure, and then to adjust.

- CAD drawing does not require a computer.
- CAD files prepared on office PCs can be edited and managed by users on RTK data collection terminals.
- Drawing tools include up to 11 types of figures and one type of text.

### Static & PPK Measurement : More Assistance Now is Available



The software provides both static and PPK data collection capabilities.

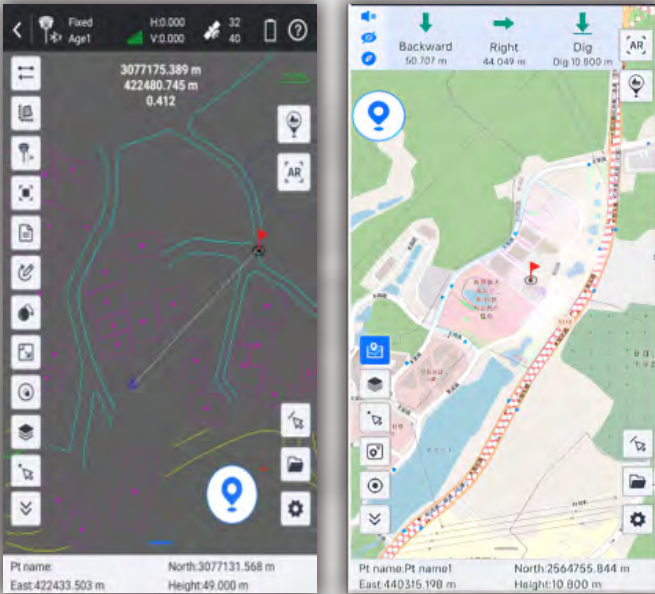
- Data can be downloaded wirelessly, no need for a PC and cables.
- It is possible to convert .sth files into RINEX files right on the data collector or tablet or your phone, no need of PC.
- Data can be shared with others through mobile Internet.
- The accuracy of PPK data collection is as high as Trimble equipment, the result can be directly imported for use in TBC.



# Ksurvey APP

## Stakeout: Lighten Your Load, Increase Your Output

### CAD Stake-Out : Save Labor Cost and Reduce Errors



Traditional data collection software requires users to import points or lines to be setout from .csv or .txt files, users need to spend quite a lot of time to edit point and line libraries.

Moreover, for complex shapes such as curves, circles, and polygons, the traditional stake-out process is complicated. Now, our new CAD stake-out program offers a superior solution for surveyors.

- No need for manual editing of point libraries.
- Staking-out geometric shape is faster and easier.

- No need for obtaining coordinate files before work. Staking-out can be done with just a CAD drawing.
- Online maps and CAD drawings can be displayed simultaneously, improving accuracy.
- AR guide lines make staking-out more intuitive.

### Live-View Stake-Out : Faster, More Accurate, More Intelligent



(This function only works with the receiver models that have downward-facing camera or dual-cameras)

Users utilize the real-time imagery captured by the camera at the bottom of the receiver and the AR guide lines displayed by the software, to locate the target points.

- When users perform stake-out with a dual-camera GNSS receiver, the software can call upon both cameras to work together. At medium to long distances, the software uses the front-facing camera to indicate the direction of travel, and at close range, it uses the downward-facing camera to find the specific location. This further increases the speed of staking out.

- AR guide lines can be displayed in point staking out, line staking out, and CAD staking out programs.

## Additional Features

### Compatible with Multiple Devices



The App Now works with GNSS, Total Station, Echo Sounder, GIS Tablet, in future it will work with SLAM Scanner, Terrestrial Lidar Scanner.

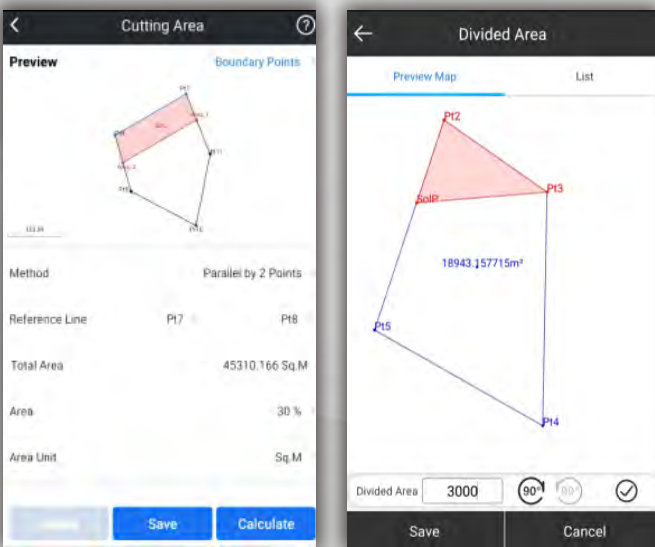
### Innovations

### for Better User Experience

- RTK Data Backup
- QR Code Share
- Multiple Basemap Support
- Basemap
- Adjustment
- Network Mount Point Sorting
- NMEA Output Setting

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### Area Division : Developed for Professional Cadastral Survey and Stake Out



Select points to form a polygon, and directly identify the area division points for the surveyor to stake out. There is no more need for the user to guess a position to measure, and then to adjust.

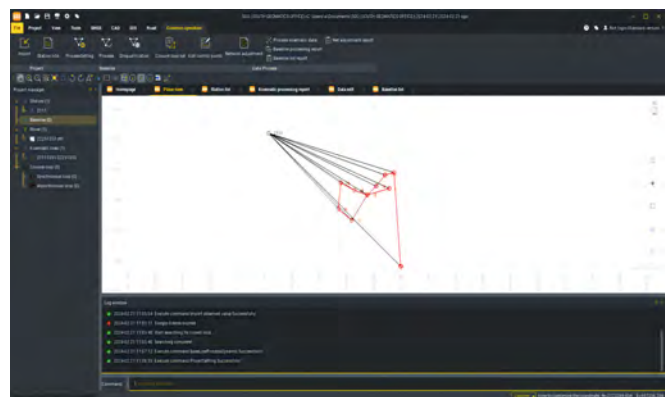
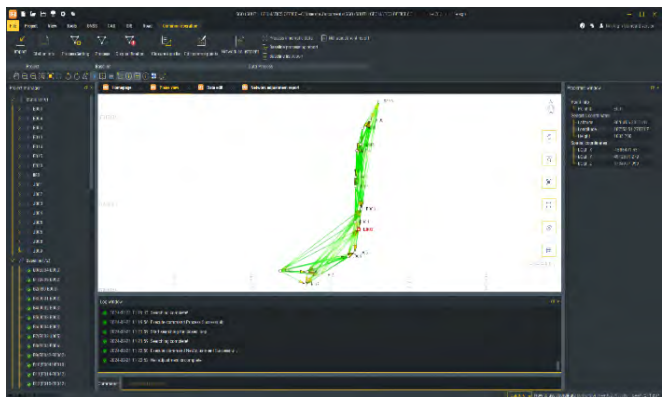
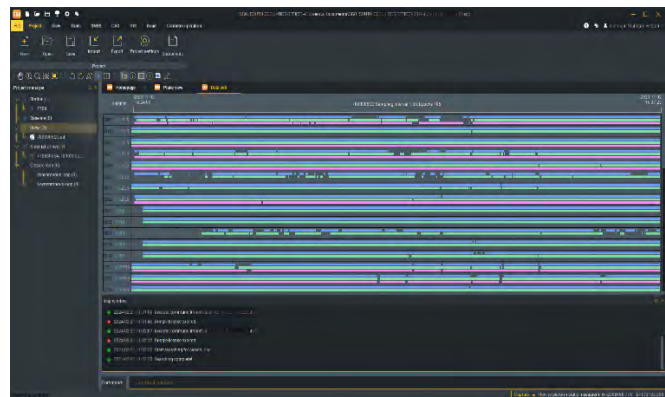
- Six methods of division to determine the area division points. The methods are flexible and suitable to different user needs.

- The graphic display is intuitive and understandable.



# KOLIDA Geo Office (KGO)

Ideal GNSS Data Processor, Help You To Keep Advancing



## Data Processing & Reporting

When surveyors need to do post-processing of GNSS data, our software always can provide state-of-the-art technology to help you to produce optimal results. User just need to import field data, the software will automatically process GNSS baselines. Once results come out, the software can generate reports.

## High Accuracy Guaranteed

RTK check, the unique function in our software, can compare RTK and PPK results to automatically acquire the most accurate coordinates for each target point.

It fills up the gap of poor corrections in RTK or hindered observations in PPK.

This improvement is to provide guarantee for your every survey.

## RINEX Import and Export

This feature enables users to import the third party GNSS receiver data into our software and post-process it, by using the industry standard RINEX format.

## 3D Modelling

User can import photogrammetry image data into the software, to achieve 3D modeling, visually presenting geographic information data such as coordinates, areas, and volumes.

Model data can be transformed into different formats and applied with various coordinate parameters based on actual needs, making it adaptable to a wider range of application scenarios.

