

SPECIFICATIONS

GNSS Performance	
Channels	1598
GPS	L1C/A, L2P, L1C, L2C, L5
GLONASS	G1, G2, G3
BeiDou	B1I, B2I, B3I, B1C, B2a, B2b
Galileo	E1, E5b, E5a, E6, E5AltBoc*
QZSS	L1C/A, L5, L1C, L2
SBAS	L1, L5
IRNSS	L5*
L-Band*	B2b

Positioning Accuracy	
Code Differential	Horizontal: $\pm 0.25\text{m} + 1\text{ppm}$
GNSS Positioning	Vertical: $\pm 0.50 + 1\text{ppm}$
SBAS Positioning	Typically $< 5\text{m}$ 3DRMS
High Precision Static	Horizontal: $\pm 3\text{mm} + 0.1\text{ppm}$ Vertical: $\pm 3.5\text{mm} + 0.4\text{ppm}$
Fast Static and Static	Horizontal: $\pm 2.5\text{mm} + 0.5\text{ppm}$ Vertical: $\pm 5\text{mm} + 0.5\text{ppm}$
Post Processing	Horizontal: $\pm 8\text{mm} + 1\text{ppm}$
Kinematic (PPK)	Vertical: $\pm 15\text{mm} + 1\text{ppm}$
Real Time Kinematic (RTK)	Horizontal: $\pm 8\text{mm} + 1\text{ppm}$ Vertical: $\pm 15\text{mm} + 1\text{ppm}$
Network RTK (VRS, FKP, MAC)	Horizontal: $\pm 8\text{mm} + 0.5\text{ppm}$ Vertical: $\pm 15\text{mm} + 0.5\text{ppm}$
RTK Initialization Time	Time 2-8s, reliability $> 99.99\%$
Positioning Rate	1Hz-20Hz
Inertial Measurement	Supporting walk to activate IMU Tilt Angle: up to 60 degrees Accuracy: down to 2cm (Typically less than $10\text{mm} + 0.7\text{mm}/^\circ\text{tilt}$)

Data Formats	
Positioning Data	NMEA 0183, PSIC, PJK, Binary Code RTCM 2.1, RTCM 2.3, RTCM 3.0,
Differential Correction	RTCM 3.1, RTCM 3.2, CMR, CMR+ Static
Static	STH, Rinex 2, Rinex 3
Network	Supported VRS, FKP, MAC, Ntrip

Operation Mode	
Base	Base Internal Radio\ Base External Radio (wireless Radio)\ Base wifi
Rover	Rover UHF\ Rover Bluetooth
Static	Static\ PPK

UHF Radio Characteristics	
TX/RX	Transmitting and Receiving
Frequency Range	410-470MHz
Protocols	Farlink\Trimtalk\South(KOLIDA)
Channels	60 channels for Farlink protocol 120 channels for other protocols

Hardware	
Size	131mmX80mm
Weight	800g
Data Storage	4GB SSD internal storage Support external USB storage (up to 32GB) Automatic cycle storage Changeable record interval Up to 20Hz raw data collection
Built-in Camera	2MP
Camera View Angle	75°
Communication	5 Indicator lights (4 in front panel, one at bottom) 1 Button 1 Type C USB port 1 UHF antenna port SOC OS WEB UI WIFI: 802.11 b/g/n standard Bluetooth 4.2 standard and Bluetooth 2.1+EDR NFC

Voice Guide	Intelligent voice technology provides status indication and operation guide Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define
Environment	Operating: -30°C to $+70^\circ\text{C}$ Storage: -40°C to $+80^\circ\text{C}$
Humidity	100% condensation
Ingress Protection	IP68 waterproof, sealed against sand and dust
Shock	Survive 2m pole drop on concrete

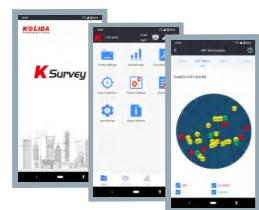
Power	
Battery	7.4V, 6800mAh unremovable battery
Battery Life	10-15 hours
Fast Charge	4 hours charge to full power
USB recharge	Power Bank for recharging/ Power Bank for external power supply

K6

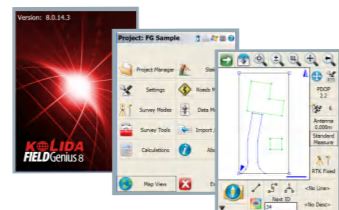
See Better, Work better!



Field Software



K Survey



Field Genius



Surv X

- Live-view Stakeout, Helps You to Capture Points Perfectly
- 1598 GNSS Channels, Best-in-class Signal Tracking Capability
- k-Fill, Keep Fixed Solution When Losing Correction Signal
- Farlink Radio with Optimized Working Range
- New IMU Program, Walking to Initialize
- Weights Only 0.8 kg, IP68 Water-Dust Proof Level

AR GNSS + New IMU, More Intelligence, Higher Efficiency!



Stakeout Intuitively with Live-view Video Display

This new feature combines real-time image display with RTK positioning. K6 captures real-time video through its built-in camera, and users can directly see the points to be setout on the collector screen, which is accurate and intuitive.



Guide-line Powered by AR

AR technology superimposes a virtual guide-line and distance numbers on the real-time video display. Users do not need to recognize the directions themselves, they only need to follow the guide-line to find the point to be setout, which saves time and effort.



Simpler and Easier-to-Use Inertial Tilt Measurement

Many GNSS RTK systems require users to perform complex settings and calibration before doing inertial tilt measurement.

After the latest program was applied to K6, users only need to walk a few steps to activate the inertial sensor. This improvement makes measurements simpler and faster.



1598 Channels, Capture Satellites As Many As Possible

K6 is capable to track signal from 5 satellite constellations (GPS, Glonass, Beidou, Galileo, QZSS), process signal of up to 21 frequencies.

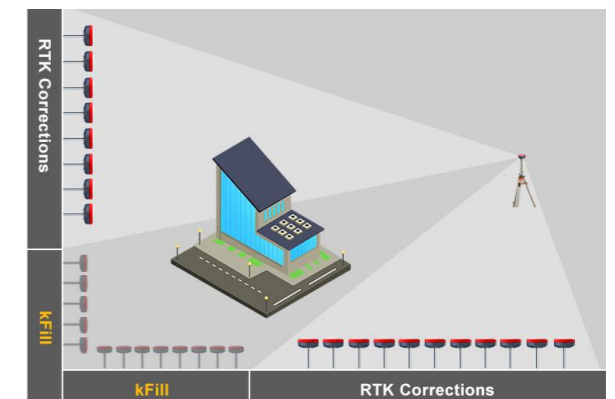
When compared to traditional GNSS RTK, K6's accuracy is higher, get fixed solution faster, the working performance in forest and city center is better.



“kFill” Save RTK/ CORS Signal Loss

KOLIDA kFill technology is able to provide a 5 minutes sustainable high accuracy service during temporary RTK or CORS signal coverage outages.

After RTK and CORS signal recovers, receiver will switch to real-time corrections seamlessly.



Smaller but More Durable

Thanks to the high-capacity battery and the intelligent power management plan, K6 can work up to 12 hours in RTK radio rover mode, up to 15 hours in static mode. The charging port is Type-C USB, users can choose KOLIDA quick charger or their own smartphone charger to recharge. Power bank also can be used as an external power supply.



Ultra Light, Comfortable Experience

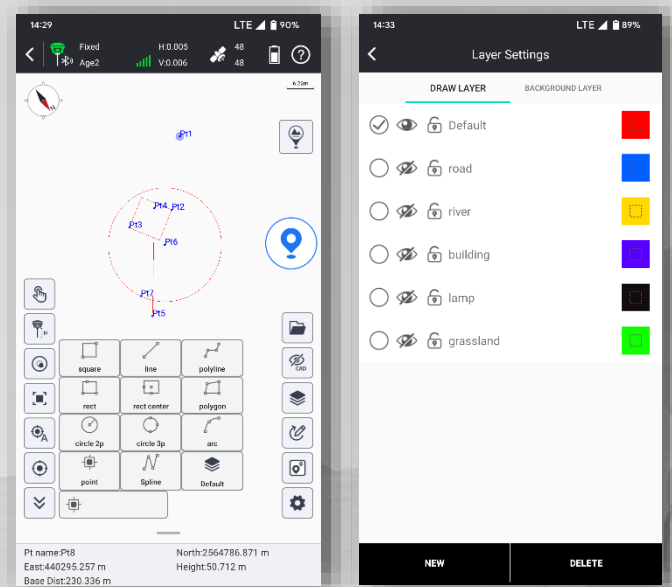
K6 is an ultra light GNSS receiver that leaves the competition behind. Its total weight is only 0.80 kg including battery, 40% even 50% lighter than a traditional GNSS receiver. The light-weight design reduces surveyor's fatigue, increase their mobility, is especially helpful to work in challenging environment.



Ksurvey APP

Field Data Collection & Mapping: The Most Advanced is Here

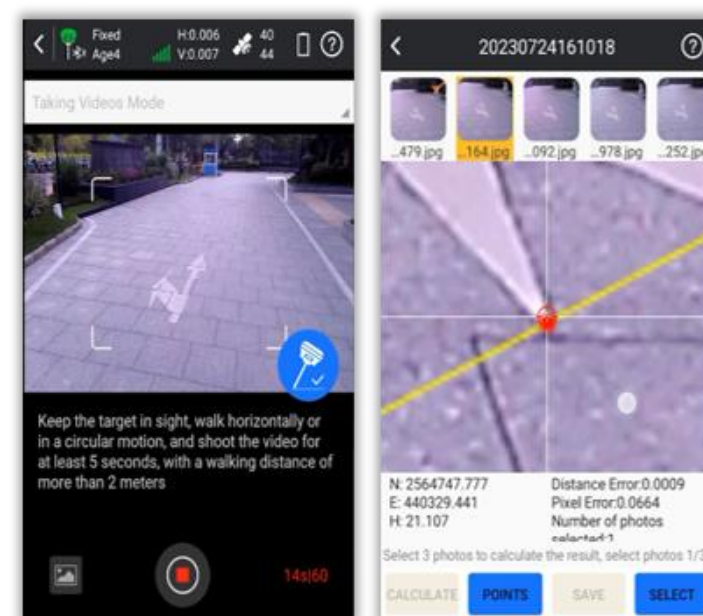
Measure & Draw : Save Time in Field work and Office



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

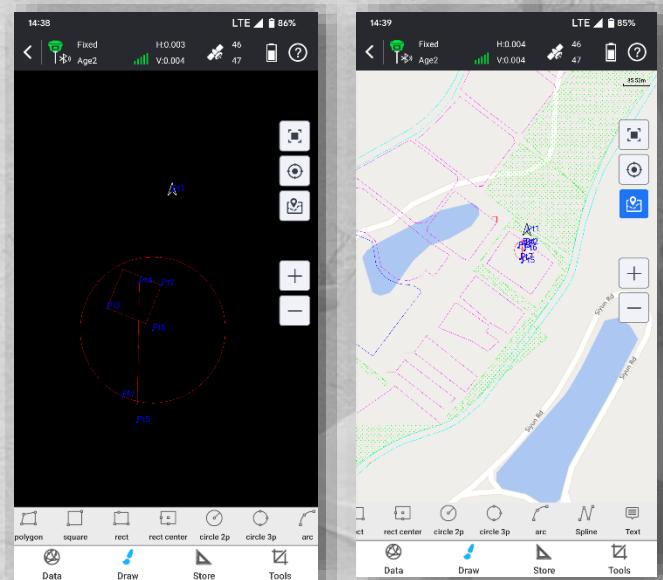


Photogrammetry Measurements can be conducted by taking pictures or videos. Coordinates of all points in the photos can be acquired.

- 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)

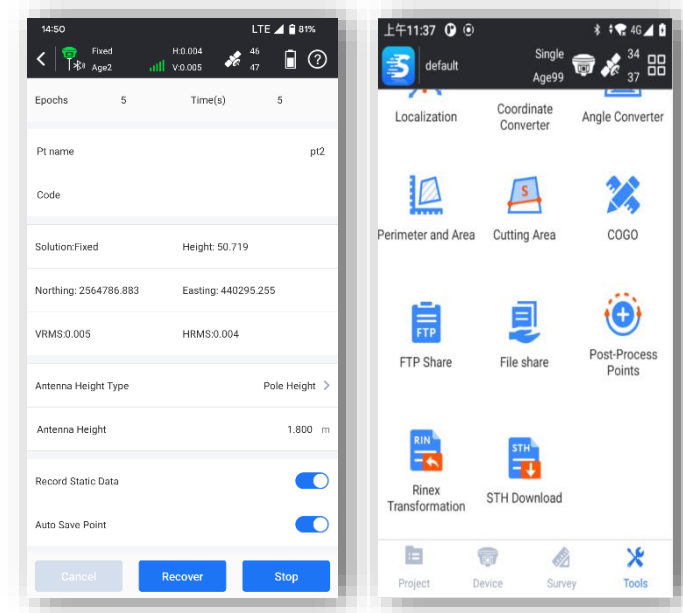
CAD Draw : Drafting without a PC



This feature enables CAD drawing capabilities, which were previously only possible on a PC. Now surveyors can edit CAD map on RTK controller or tablet or phones.

- 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



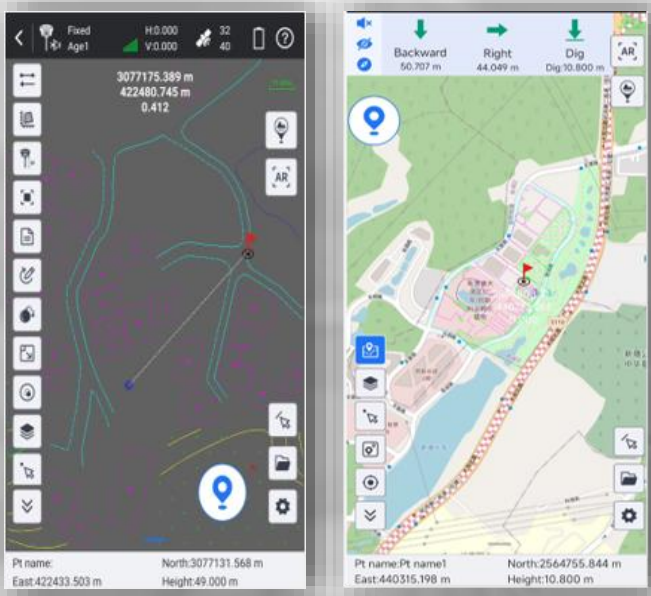
The software provides both static and PPK data collection capabilities.

- 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



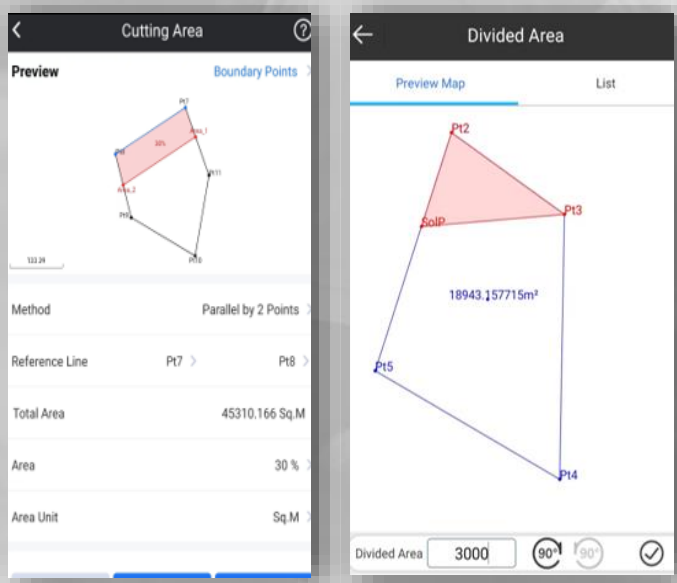
(This function only works with the receiver models that have downward-facing camera or dual-cameras)

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

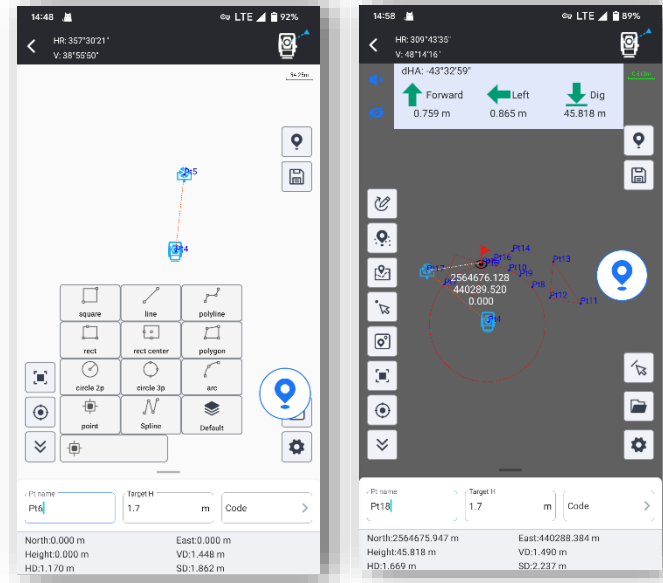
Area Division : Developed for Professional Cadastral Survey and Stake Out



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.

Compatible with Multiple Devices



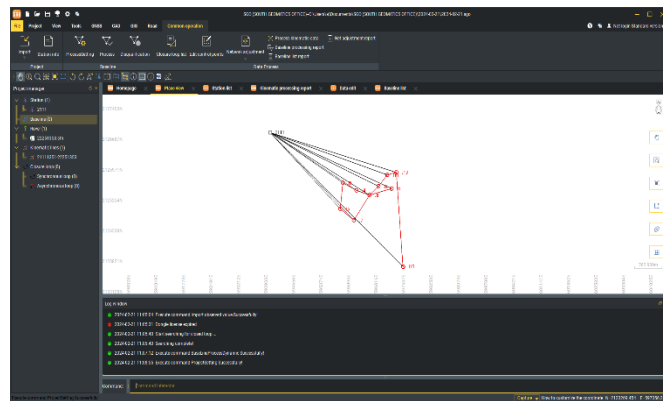
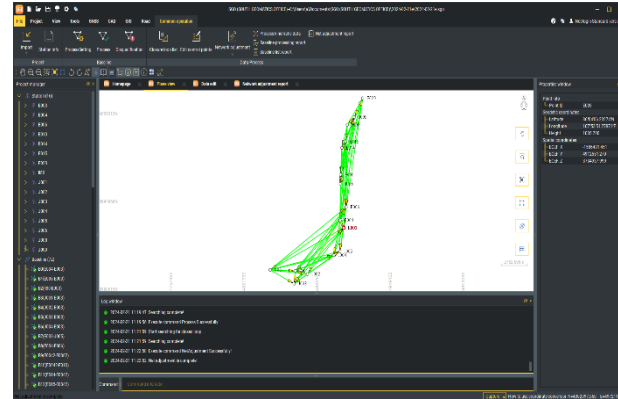
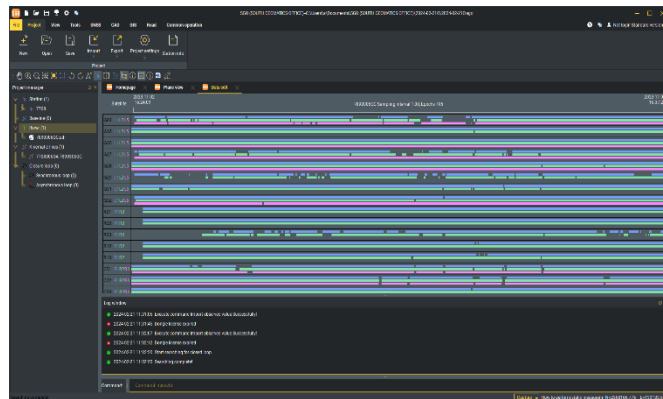
The App Now works with GNSS, Total Station, Echo Sounder, GIS Tablet, in future it will work with SLAM Scanner, Terrestrial Lidar Scanner.

Innovations for Better User Experience

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

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.

