Specifications

GNSS characteristics

- **555 GNSS channels**
  -Beidou(BDS) B1, B2, B3
  -GPS L1C/A, L1C, L2C, L2E, L2P, L5
  -GLONASS L1C/A, L1P, L2C/A, L2P, L3
  -QZSS L1C/A. SAIF, L1C, L2C, L5, LEX
  -SBAS L1C/A, L5
  -Galileo Glove-A and Glove-B,
  E1, E5A, E5B, E5AltBOC, E6
  -EGNOS,WAAS,MSAS,GANAN
- **Initialization:** time <10s, reliability >99.99%
- Supported data formats:
  CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2
- Output data formats:
  NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF

Inertial Measurement

- Tilt Angle: up to 60 degrees
- Accuracy: down to 2cm

Positioning Accuracy

Code differential GNSS positioning

- Horizontal: ±0.25m+1ppm
- Vertical: ±0.50m+1ppm
- SBAS positioning accuracy:
  typically<5m 3DRMS

Static

- Horizontal: ±3mm+0.1ppm
- Vertical: ±3.5mm+0.4ppm

Real-time kinematic (RTK)

- Horizontal: ±8mm+1ppm
- Vertical: ±15mm+1ppm

Network RTK

- Horizontal: ±8mm+0.5ppm
- Vertical: ±15mm+0.5ppm

RTK initialization time

- 2~8s

Physical characteristics

Size

- 17.5 x 17.5 x 8.3 cm

Weight

- 1.33 kg (2 batteries included)

User interface

- Five Indicator lights
- Two buttons
- Linux System

I/O interface

- 5PIN LEMO external power port+RS232
- 7PIN external USB(OTG)+Ethernet
- Bluetooth 2.1+EDR standard
- Bluetooth 4.0 standard, support android, ios connection

Memory

- 8GB SSD internal storage
- Support external USB storage (up to 32 GB)
- Automatic cycle storage
- Changeable record interval
- Up to 50Hz raw data collection

Operation

- RTK rover & base
- RTK network rover: VRS, FKP, MAC
- NTRIP, Direct IP
- Post-processing

Environmental characteristics

- Operating temperature: -45° to +65°C
- Storage temperature: -55° to +85°C
- Humidity: 100% condensing
- IP67 waterproof, sealed against sand and dust
- Drop: 2m pole drop on concrete

Power characteristics

- Two Li-Ion batteries, 7.4 V, 3400 mAh
- Battery life: >14h (static mode)
  >10h (internal UHF base mode)
  >12h (rover mode)
- External DC power: 9-25 V

UHF Radio characteristics

- Built-in radio
- Frequency Range 410-470MHz
- Protocol: TrimTalk450s, TrimMark3, SOUTH (KOLIDA)
- 1W/2W/3W switchable
- typically working range 7-8km
- "Barrier-Free" Measurement Technology: Repeater/ Router/ CSD mode

Cellular module characteristics

- WCDMA/ CDMA2000/ TDD-LTE/ FDD-LTE 4G
- Compatible with 3G GPRS/ EDGE

WebUI

- Configure and monitor receiver by web server via Wi-Fi or USB cable

NFC

- Close range (shorter than 10cm) automatic pair between receiver and controller (need NFC chip in controller)

Wifi

- 802.11 b/g standard
- Hotspot: allow device to access in
- data link: broadcast differential data

Voice Guide

- intelligent voice technology provides status indication and operation guide
- Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define

Standard system components

- K5 UFO Receiver
- Li-Ion battery
- Charger and adapter
- All-direction antenna
- Tape measure
- 30 cm pole extension
- 7-pin to OTG cable
- Engineering Star (Windows)
- Engineering Star (Android)
- 1 year warranty

Optional system components

- External Radio (410-470 MHz, 5-35W)
- Battery Case SA-6003
- Data collectors
  - K720 (Windows)
  - H3 plus (Android)
  - T17 (Windows)
  - X11 pro (Windows)
- Field software
  - Field Genius (Windows)
  - SurvX (Android)
- 1-2 year warranty extension

Field Software

Engineering Star


Field Genius


Surv X

KOLIDA
Professional's Choice

GUANGDONG KOLIDA INSTRUMENT CO., LTD.
Add: 7/F, South Geo-information Industrial Park, No.39 Si Cheng Road, Tian He IBD, Guangzhou 510663, China
Tel: +86-20-22139033 Fax: +86-20-22139032
Email: export@kolidainstrument.com market@kolidainstrument. com http://www.kolidainstrument.com

KOLIDA
Professional's Choice

K5 IMU

A future-oriented productivity tool

YouTube K5 IMU

- 555 Channels GNSS Mainboard, All Constellations Supported
- Inertial Measurement + GNSS Positioning, More Accurate and Faster
- Up to 60° Tilt Angle, More Convenient to Measure in Difficult Terrain
- All-new Long Range Radio Link with Anti-interference Capability

K5 IMU

A future-oriented productivity tool

More Advanced GNSS Positioning Engine

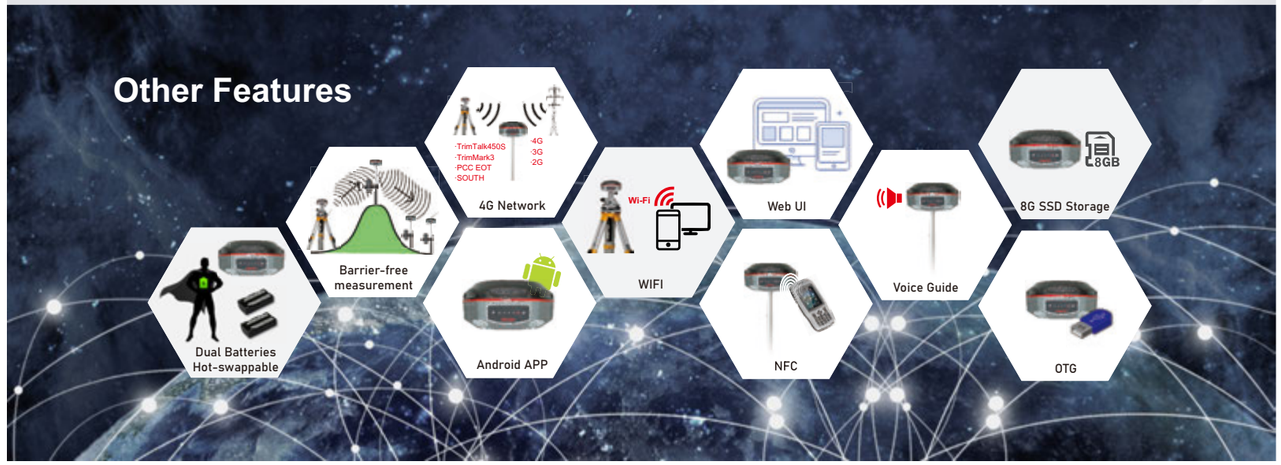
Featuring a powerful 555 channels GNSS mainboard inside, K5 IMU can track and process all the existed satellite constellations. With the utility of BEIDOU (COMPASS) signal, the data acquisition speed and GNSS signal stability are greatly improved from old generation technology.

Inertial Measurement, a Technology that Greatly Improves Efficiency

The latest inertial measurement technology is onboard with K5 IMU. The tilt survey is no more affected by the earth's magnetic field and requires no correction. It can be activated and start working within only few seconds. With a maximum tilt angle of 60°, there is no need for centering, this fast positioning will increase measurement speed by 20% or even more. The combination algorithm of IMU + GNSS can get fixed solution faster and keep measurement results more stable.

New Radio Link, Improved Functions and Higher Performance

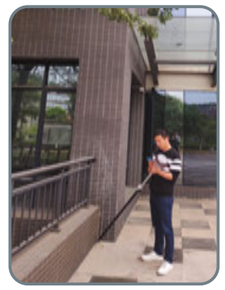
SDL-400 built-in radio can send signal as far as 7km in urban area and 8km in suburb. The maximum coverage area is up to 200 sq.km. It also features anti-interference capability, so K5 IMU can work close to interference source. The next upgrade will increase the communication channels from 8 to 120, to improve the signal transmition quality to a new level. Meanwhile, K5 IMU will support more radio protocol such as Satel, CHC, ZHD, user will have more flexibility to organize the working team and equipment according to mission demand.

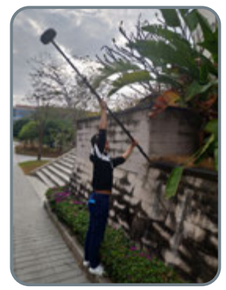


How can Inertial Measurement transform the way we work?

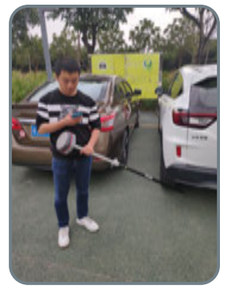
Bring More Safety to Your Work

Bring More Sufficient GNSS Signal to Non-signaled Point





Conveniently Measure Inaccessible Points



Data Collector. Simply Trustable

T17N

- Windows Mobile 6.5
- 1Ghz CPU, RAM 512MB
- 1GB ROM, Extendable 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

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