K5 UFO GNSS Receiver

K5 UFO GNSS Receiver

The advantage of lower price and better performance are depending on the reasonable and optimizing design to the subassemblies and components.

K5 UFO combines the extraordinary GNSS signal tracking and processing technology of high-end equipment and the economy of an entry-level equipment.

Its superior flexibility and long endurance make it be a high-performance system to meet your diverse work needs on both simple and complex projects.

Key Features

- 692 Channels
- Enhanced endurance
- Long range radio Link
- WEB UI, WIFI, OTG
- Android Application
- Barrier-Free Measurement

692 CHANNELS

Featuring a powerful 692 channels GNSS mainboard, K5 UFO can track and process all the existed satellite constellations.

The tracking speed, signal reliability, positioning accuracy is greatly improved from old generation technology.

ENHANCED ENDURANCE

To have a longer working time in the field, dual batteries hot-swappable function is onboard with K5 UFO. The typical battery life is 10 to 14 hours (RTK mode/ static mode).

ANDROID APPLICATION

KOLIDA SurvX field software provides an advanced , efficient, easy-to-use workflow to surveyors. Equipment configuration, coordinate system setting, data management, surveying programs are more intuitive and powerful than ordinary software.

LONG RANGE RADIO LINK

SDL-400 built-in radio can send signal as far as 7 km in urban area and 8 km in suburb. The maximum coverage area is up to 200 sq.km. It also features anti-interference capability, so K5 UFO can work close to interference source.

BARRIER FREE MEASUREMENT

In difficult environment surveyor may lose connection with base station or VRS network. This unique feature can help user to continue working without interruption. 3 creative work modes to choose: Repeater/ Router/ Mobile Internet Reference Station.

Specifications

GNSS characteristics
- **692 GNSS channels**
  - GPS L1C/A, L1C, L2C, L2E, L5
  - GLONASS L1C/A, L2C/A, L2P, L3
  - BeiDou B1, B2, B3
  - Galileo GIOVE-A, GIOVE-B, E1, E5A, E5B
  - SBAS L1C/A, L5
- **Initialization:** time <10s, reliability >99.99%
- **Supported data formats:**
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

Positioning Accuracy
Code differential GNSS positioning
- Horizontal: ±0.25m+1ppm
- Vertical: ±0.50m+1ppm
- SBAS positioning accuracy: typically<5m 3DRMS

Static
- Horizontal: ±2.5mm+0.5ppm
- Vertical: ±5mm+0.5ppm

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 +60°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

KOLIDA GEO OFFICE
Office Suite for Data Processing.

KOLIDA SurvX
Field Software for Android Device

KOLIDA Instrument Co., Ltd
7/F, No.39 SiCheng Road, Guangzhou 510630, China
+86-20-22139033
export@kolidainstrument.com

KOLIDA
Professional's Choice