SPECIFICATIONS

Satellite Signals Tracked Simultaneously	
Signal tracking	220 channels
	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
GNSS features	Positioning output rate: 1Hz~50Hz
	Initialization time: <10s
	Initialization reliability: >99.99%

Positioning precision	
Code differential GNSS positioning	Horizontal: 0.25m+1ppm Vertical: 0.50m+1ppm
	SBAS positioning accuracy:typically<5m 3DRMS
Static GNSS surveying	Horizontal: 2.5mm+0.5ppm Vertical: 5mm+0.5ppm
Real-time kinematic surveying	Horizontal: 8mm+1ppm Vertical: 15mm+1ppm
Network RTK	Horizontal: 8mm+0.5ppm Vertical: 15mm+0.5ppm
RTK initialization time	2~8s

User interaction	
Operating Time	Linux
Buttons	Single Button Operation
Indicators	Three Indicator Lights
Web UI	Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi or USB
Voice guide	iVoice intelligent voice technology provides status and voice guide
	Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define
Secondary development	Providing secondary development kit

Hardware performance	
Dimension	134x134x118mm
Weight	1kg (battery included)
Material	Magnesium aluminum alloy shell
Operating	-45°C~+60°C
Storag	-55°C~+85°C
Humidity	100% Non-condensing
Waterproof/Dustproof	IP67 standard, protected from short time immersion to depth of 1m
	IP67 standard, fully protected against blowing dust
Shock and vibration	Withstand 2 meters pole drop onto the cement ground naturally
Power Supply	9-25V DC, overvoltage protection
Battery	Rechargeable, Lithium-ion battery, 7.4V
Battery life	Single battery: >7h (static mode), >5h (internal UHF base mode), >6h (rover mode)

Communications	
I/O port	5PIN LEMO external power port+RS232, 7PIN external USB(OTG)+Ethernet
	1 radio antenna interface, SIM card slot
Wireless modem	Built-in radio, 1W/2W/3W switchable, typically work range can be 8km
	Barrier-Free Measurement Technology: Repeater/ Router/ Eagle/ Lark/ CSD mode
Frequency Range	410-470MHz
Communication Protocol	TrimTalk450s, TrimMark3, SOUTH (KOLIDA)
Cellular Mobile Network	WCDMA/CDMA2000/TDD-LTE/FDD-LTE 4G network modem, downward compatible with 3G GPRS/EDGE
Double Module Bluetooth	BLEBluetooth 4.0 standard, support for android, ios cellphone connection
	Bluetooth 2.1+EDR standard
NFC Communication	Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed)
External Devices	Optional external GPRS/EDGE dual-mode communication module, switchable; allow to connect external WLAN card

WIFI	
Standard	802.11 b/g standard
WIFI Hotspot	The WIFI hotspot allows smart mobile terminal to connect and access to the internal webserver to control and monitor receiver
WIFI data link	To work as the datalink that receiver is able to broadcast and receive differential data via WIFI

Data storage/ Transmission	
Data Storage	8GB SSD internal storage
	Support external USB storage (up to 32 GB) and automatical cycle storage
	Changeable record interval, up to 50Hz raw data collection
Data Transmission	USB data transmission, supporting FTP/HTTP data download
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, Trimble GSOF
	Network model support: VRS, FKP, MAC, fully support NTRIP protocol

Inertial sensing system	
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
Thermometer	Built-in thermomter sensors, adopting intelligent temperature control technology which can mornitor and adjust the temperature of receiver in real time

KOLIDA
Professional's Choice

GUANGDONG KOLIDA INSTRUMENT CO., LTD.

Add: 2/F, Surveying & Mapping Building (He Tian Building),NO.24-26, Ke Yun Road, Guangzhou 510665, China
Tel: +86-20-85542075   Fax: +86-20-85542136
E-mail: export@kolidainstrument.com   http://www.kolidainstrument.com

KOLIDA
Professional's Choice

SUPER RTK
K5 Plus+

When other receivers
Lost SIGNAL,
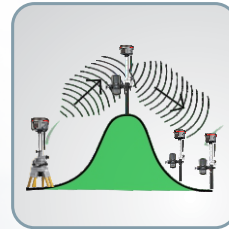**It is still on**
the JOB!

SUPER RTK K5 Plus[+]

The best signal acquisition ability

SUPER RTK is far ahead of ordinary GNSS receivers.

Its mission area could be much bigger than others.
It works where other receivers lose signal.
It gives you total freedom: Web UI & SMS control, smart Apps, OTG field download.

Exceed the limitation,
Release your potential,
SUPER RTK.

Key Features

- Barrier-Free Measurement

In difficult environment you may lost connection with base station or VRS network. Don't be disappointed, you can choose from 5 creative work modes to continue surveying without interruption. (Repeater/ Router/ Eagle/ Lark/ CSD)

- Long Range Radio Link

7-8Km
200Km²

SDL400 built-in radio can send signal as far as 7 km in urban area, 8 km in suburban. The maximum coverage is up to 200 sq.km, suitable to have multiple rovers work simultaneously.

- Anti-interference

SDL400 built-in radio features anti-interference capability, so K5plus+ can work close to power plant, transformer substation, mobile signal tower and other interference source.

- The Best in Town

To improve the performance in city survey, R&D team upgraded the network module from 3G to 4G. Under 4G mobile network, data transmission is faster and more stable. SUPER RTK is still compatible with 3G and 2G.

Other Features

Multi-Constellation	8KM Radio Range	410-470 Radio Frequency
SMS Remote Control	Tilt Survey	Electronic Bubble
Linux OS	WIFI	WEB UI
8G SSD Storage	OTG	Bluetooth 4.0

Data Collectors Selectable

X11 Lite
Windows Mobile 6.5
1Ghz CPU, RAM 512Mb
ROM 8GB, SD expansion to 32GB
Numeric keyboard
Weight 600g only
7.2V removable Li-ion, 3400mAh
3.7inch 480x680VGA, LED backlighted
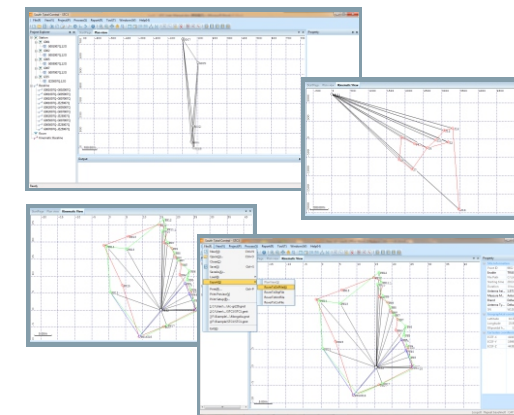MIL-STD-810G and Ip67
OTG function supported

lite

Additional Funtion of X11 Pro
72 channels GNSS chip
AutoForcus 5MP
Navigation update rate 4Hz
WCDMA communication module

Pro

Post-Processing Software *(Free of Charge)*

KOLIDA Total Control integrates static data processing and kinematic adjustment *(New program)*

-Antenna manager with popular receiver types.
-Compatible with numerous data format.
-Update online.
-Abundant report exporting.

KOLIDA GNSS Processor *(Classical program)*

-Fast processing and clear display
-Transformable to RINEX format
-Full options for result Export
-Powerful baseline settings
-Manually edit and filter satellite data for best result

Field Software

EGStar 3.0

KOLIDA Engineering Star *(Free of Charge)*

Engineering Star is the most welcomed field software in China. Even a novice can do all complex GNSS survey with EG Star with only six buttons on one screen.
- At any time, you can check your hardware and software status, RTK working mode and switch screen freely.
- Easy to handle multiple RTK surveying task with powerful, but friendly user interface.
- Support numerous file formats in export/import.

MicroSurvey FIELDGenius *(Need to purchase individually)*

Field Genius is a powerful survey data collection software from Canada. Advanced Roading, Surfacing, Slope Staking, Code Free Linework, Smart Points and GPS support and Live Graphics make FieldGenius the choice of organizations that value productivity. Multi-language is available.