Standard Components

Reference Station

G9-1-100 Receiver	G9-1-200 Li-ion Battery	G9-1-300 Wireless Radio	G9-1-400 Accumulator	G9-1-500 UHF Antenna

Rover Station

G9-2-100 Receiver	G9-1-200 Li-ion Battery	G9-2-001 Controller	G9-2-300 Bracket	G9-2-200 Carbon Fibre pole

Diagram

Reference Station   Rover Station

Specifications

Receiver		Position update and lantency	
Type	Dual-frequency	Position update rate	Up to 1sec (1Hz)
Mainboard	Rugged OEM	Position lantency	0.03sec or less
No. of channels	Parallel 24 channels	**Real-time RTK and DGPS/RTCM Data Formats**	
LED status indicators	3 for power, tracking and bluetooth	RTK Data Formats	Real-time RTK standard
Commuincation	RS-232, Bluetooth		DGPS/RTCM standard
Data download	RS-232, USB		RTCA, RTCM, RTCMV3, CMR and NMEA
Power supply	2 Li-lion battery	**Data links**	
	Working time: >12 hours	Radio modems	For SGS328 Real-time RTK rover: The mini-size of UHF (230MHz) radio modem integrated into SGS328 Rover housing
	Charging time: < 4 hours		
Weight	1 kg		
Dimensions	φ 20cm x h10cm		
Temperature, operating	-20℃ ～ +60℃		For SGS328 Rea-time RTK reference setup: An external UHF (230MHz) radio can choose any channels between 0 and 9. You need an external power source for the radio.
Temperature, storage	-30℃ ～ +65℃		
Humidity	Up to 100%		
Rain/Dust	IEC 529, classification IP64		
Shock and vibration	Withstands 1m drop onto hard surfaces	Working distance	Static: ≤80 km
	Withstands vibrations during operation on large civil construction machines		RTD: ≤50km
			RTK: Limited: 25 km
			Normal: 10~15 km
Measurement precision and Position accuracy		**Controller**	
Post processing	Static (H & V): ± (5mm+1ppm)	Working distance	≤10m (for Buetooth)
Real-time (rms)	RTK:	Processor	400MHz Intel Xscale PXA255
	Hoizontal: ± (10mm+1ppm)	Operation system	Microsoft Windows CE.NET 4.2
	Vertical: ± (20mm+1ppm)	Display	Colour touch screen display
	RTD: ±0.45m	Memory	64M flash, 128M RAM
Measuring precision:	C/A code phase 6cm rms	Communication	Integrated Bluetooth
	L1 carrier phase:	Operating temp	-10℃ ～ +50℃ (14˚F to 122˚F)
	Differential 0.75cm rms	Storage temp	-25℃ ～ +60℃ (-13˚F to 140˚F)
	L2 P code 25cm rms	Humidity	5-95% RH non condensing
	L2 carrier phase:	Rain/Dust	IEC 529, classification IP54
	Differential 2mm rms	Shock	Multiple 1.2m (4 ft) frops to polished concrete
Data recording		**Others**	
Standard medium	Internal memory for receiver: 64MB	**Summary of measuring:**	Static, Rapid static, Kinematic
Data capacity	■ 200h L1+L2 data logging at 5s rate	**Onboard software:**	FOIF RTK
	■ 500h L1+L2 data logging at 15s rate		

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● Illustrations, descriptions and technical specifications are no binding and may change.

Related Product

SGS318 Integrated Static GPS Receiver

● Highly-integrated GPS antenna, OEM mainboard, bluetooth module and power system
● Built-in wireless bluetooth technology
● Positioning precision:
    Horizontal precision: ≤(5mm+1ppm)
    Vertical precision: ≤(10mm+1ppm)
● Long life Li-ion battery (<40h working)

FOIF

Suzhou FOIF Co.,Ltd.

ISO-9001
TÜV
CE
DNV
CERTIFICATED FIRM
Certificate No.QEC-4332

FOIF SGS328

Integrated SGS328 RTK GPS is the latest generation system of FOIF GPS products. The concept for whole integrative machine of SGS328 makes RTK GPS unprecedented concision and high effectiveness. The complete set of equipment can throughly gets rid of cable, big power source fetters, brings the brand-new surveying experience for you.

The revolutionary integrated SGS328 GPS receiver combines a dual-frequency GPS antenna, OEM main board, wireless Bluetooth communication module, UHF data link and li-ion battery into a single compact unit. You can measure the whole surveying area with a carbon fiber pole. The SGS328 receiver makes surveying more convenient, effective and easy with the built-in wireless Bluetooth.

Features

● Integrated:

Highly integrated dual-frequency GPS antenna, OEM main board, Bluetooth module, UHF data link and power system

● Advanced Technology:

Bluetooth module, wireless

● Reliability:

Imported OEM mainboard

Professional radio communication tech for data link

● Multi-Function:

RTK, RTD & static collection

● Convenient:

Carbon fiber pole, fine Controller bracket

● User Friendly:

Every instrument is equipped with one data controller, makes info displaying, data downloading, factors input to be an enjoyment.

Ultra-rugged handheld Controller

The Controller is a flexible, programmable and expandable portable data collection terminal, designed for a range of data collection needs. It is avaiable with Windows CE.NET configurations. The Controller delivers the performance, ruggedness and durability required for mobile data collection in an ergonomic package. Using industry standards, the design ensures of integration with your infrastructure. Unparalleled expansion and connectivity options enable a high degree of customization in order that the Controller can be tailored to your application.

On-board software FOIF RTK

FOIF RTK was designed according to customer requirements, look on data collection, pipeline piling, transect mapping, vehicle and ship, navigation and so on. Multi-domain, real-time graphics compilation, easy and convenience short-cut operation, provided with wide upgrade space.
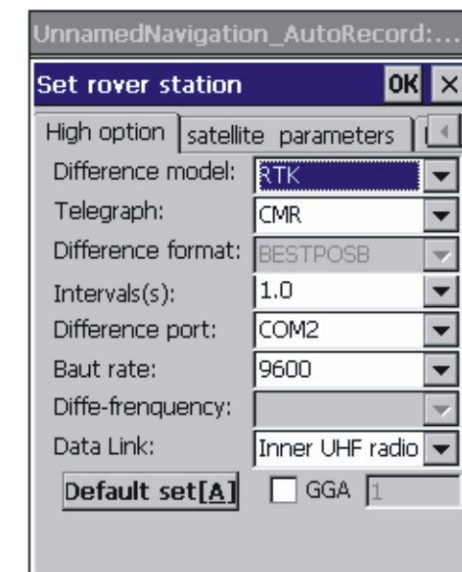
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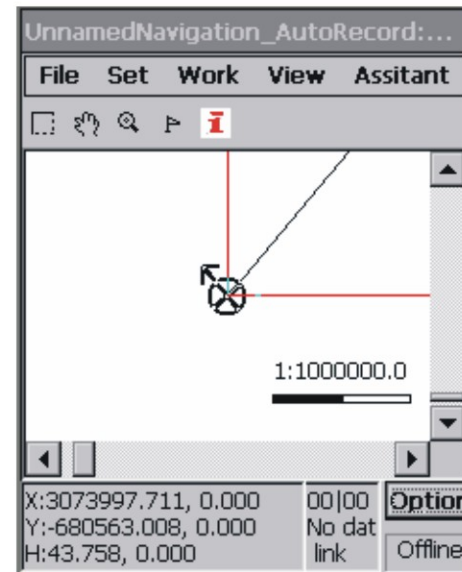
■ Main menu

You see immediately what you have done. Zoom in for details and out for the entire survey. Use the touch screen or keyboard to access your requirement.
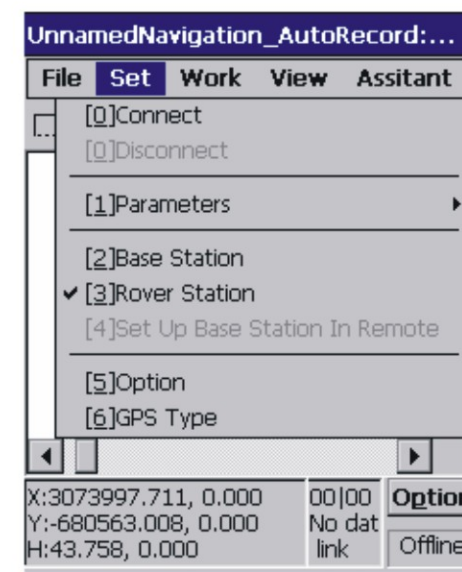
■ Operations

Rich menus performs perfect operations. There are File, Set, Work, View and Assistant. User could easily and freely shift between them.

■ Settings

RTK GPS supports many datalink accesses, and could be compatible nomal datalink formats. FOIFRTK is supplied with many useful programs, such as Data collect, Stakeout, etc.

Post-process Software

Powerful, easy and quick operation, FOIF2006 could meet everything that you need. Intuitive graphical interface makes your operation more effecient. You can manage the GPS status by rich infromation:Navigation, accuracy real-time display, data link and the active satellite.

Numerous transfrormations, ellipsoids and projections, as well as user-defined geoid models and specific coordinate systems which are supported.

User could visit our website www.foif.com.cn to download lasted software.
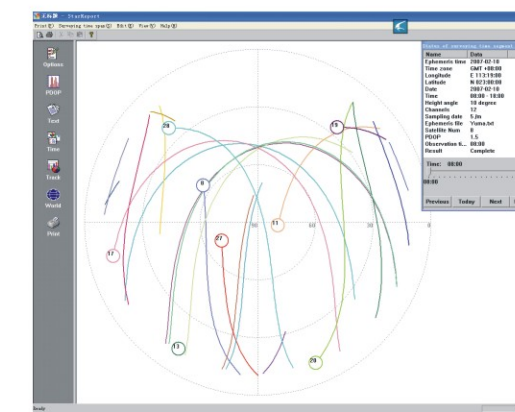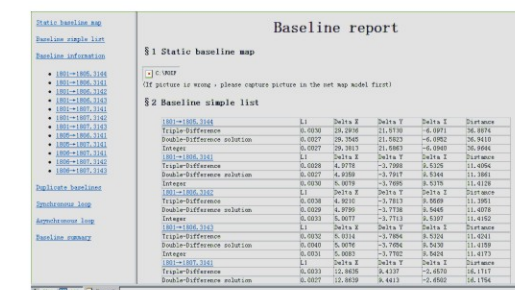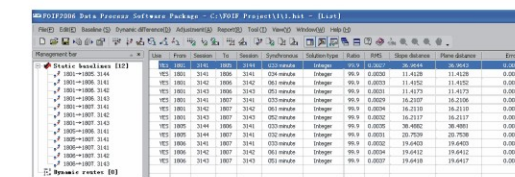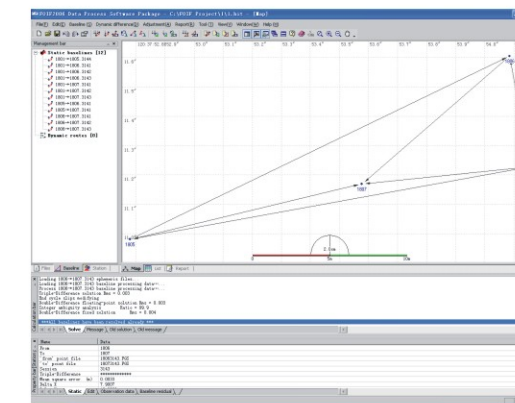
■ Main Menu

Everything you need in this softwre: import, visualization, conversions, processing, adjustment, reporting,expect, etc.

It has outstanding, easy to view and user--friendly interface.

■ Baseline Information

The powerful software manages powerful function. Perform baseline processing, you can view all baselines and their information in the list.l

■ Baseline Report

The detailed infromation of processing data could be viewed here.

■ Start Report

Before operation in field, it is better to prepare data in office. With this professional software, user could edit data more easy and effcient. The status surveying time segment gives you details, such as Ephemeris time, Time zone, Longitude, Latitude, Data, channels, etc.

Application

Stakeout

Navigation

Control Survey