

SiRFDirect Evaluation Kit

Complete Evaluation of the Enhanced GPS + Dead Reckoning Software



PRODUCT OVERVIEW

Watch the magic of reliable navigation—even in extremely obstructed environments—as you evaluate SiRFDirect™ enhanced GPS + Dead Reckoning software. Designed for complete portability and ease of use, the SiRFDirect Evaluation Receiver provides everything needed for a mobile testing environment: serial and USB ports, Dead Reckoning sensors, LED indicators, and a mounting arm to secure the receiver during in-vehicle testing.

SOFTWARE SUITE

Software Tools

An extensive suite of software tools is provided with this Evaluation Kit to help you understand what the receiver is doing and why.

- **SiRFDemo:** a PC tool that can monitor the Evaluation Receiver in real time, log data for later analysis, and configure the operating parameters of the receiver.
- **SiRFDemoPPC:** similar in function as SiRFDemo, but is designed to run on a Pocket PC for maximum mobility.
- **SiRFView:** with data already collected in the field, SiRFView quickly provides various graphical displays and map overlays for closer analysis.
- **SiRFFlash:** a flash programming utility that can be used to upgrade the software running on the Evaluation Receiver.

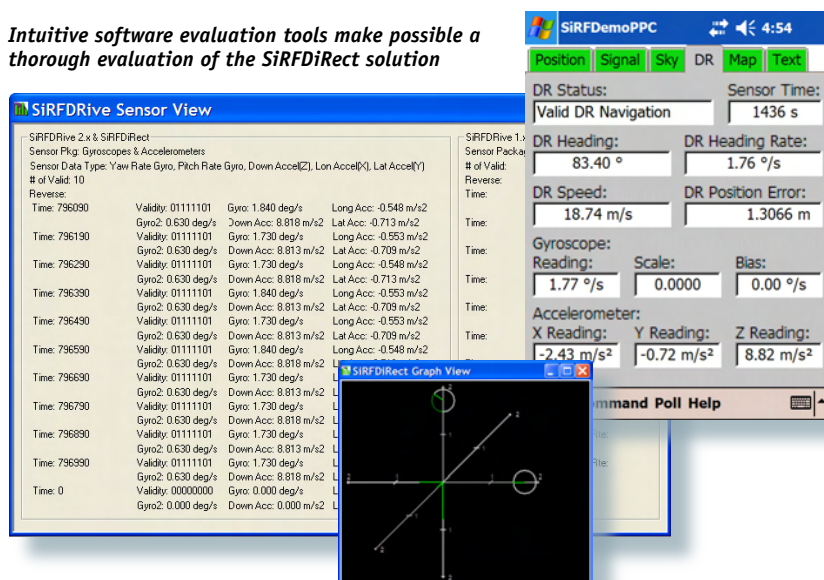
THE EVALUATION RECEIVER

Flexibility and ease of use are assured with the SiRFDirect Evaluation Kit.

Features

- Operates in either SiRF® Binary or NMEA protocol
- Receiver can be reprogrammed with new software releases
- Configurable serial port and a USB port when USB is the preferred communication method
- Equipped with Dead Reckoning accelerometers and an angular rate gyroscope
- Clearly labeled switches and COM ports
- Highly sophisticated receiver configuration software tools
- Sturdy casing and attachment arm suitable for use in the most challenging of evaluation environments

Intuitive software evaluation tools make possible a thorough evaluation of the SiRFDirect solution



SPECIFICATIONS	
Horizontal Position Accuracy¹	
Autonomous	<2.5 m
Velocity Accuracy²	
Speed	<0.01 m/s
Heading	<0.01°
Time To First Fix³	
Hot Start	<1 s
Warm Start	<35 s
Cold Start	<35 s
Receiver	
GPS Engine	GSC3f/LP
Tracking	L1, C/A Code
Channels	12
Max update rate	1 Hz
Max altitude/velocity	60,000 ft/1,000 knots
Protocol support	SiRF Binary, NMEA
Interfaces	
RS-232	2 RS-232 ports
USB	1 x Type B port
1PPS output	Female SMA
GPS RF input	Female SMA
Antenna	
Type	Magnetic active patch
Frequency	1575.42 ±1.023 MHz
Power requirements	3 ±0.5 VDC
Gain	16 ±2 dB
Power	
Supply voltage	9-24 VDC
Typ. current @ 9 V (full power)	<80 mA
Environmental	
Temperature	0 - 60°C
Humidity	up to 90% NC
Dead Reckoning Performance⁴	
GPS outage up to 10 sec:	
Horizontal position error	<10 m
Heading error	<0.5°
GPS outage up to 1 min:	
Horizontal position error	<225 m
Heading error	<5°

1. 50% 24 hr static @ -130 dBm 2. Simulator derived, 50% @ 30 m/s 3. 50% @ -130 dBm 4. GPS navigation >2 min, speed >3 m/sec, with two 90 deg turns.

ORDERING INFORMATION

Part Number	Description
9900-0276	SiRFDiRect Evaluation Kit

For more information about this and related products, contact your SiRF representative, or call our sales force at (1) (408) 467-0410, or visit www.sirf.com.

For the location of your nearest authorized SiRF distributor, visit www.sirf.com.

EVALUATION KIT CONTENTS

The SiRFDiRect Evaluation Kit provides all of the necessary hardware, software, and documentation to effectively evaluate the performance and suitability of the SiRFDiRect enhanced GPS+Dead Reckoning software. The Evaluation Kit contains the following items:

- A fully operational Evaluation Receiver based on the GSC3f/LP single-chip GPS solution
- Receiver software
- Extensive software tools suite including SiRFDemo, SiRFDemoPPC, SiRFView, and SiRFFlash
- Detailed documentation including an evaluation kit user guide, software tool user guides, and a quick start guide to help you get everything up and running in the shortest possible time
- Active 3 V GPS patch antenna with 5 meter cables
- 100-240 VAC @ 47/63 Hz power supply including international plug adapters
- 12 V cigarette lighter adapter
- Two serial cables
- One USB cable
- Mounting arm for in-vehicle testing
- A mini USB optical mouse
- A convenient 33 x 10 x 28 cm carrying case


THE SiRF ADVANTAGE

SiRF established the industry benchmark for well-designed evaluation kits, and combined with award-winning SiRFstarIII™ architecture, this toolkit provides you with an ideal evaluation experience.

WORLDWIDE ACCESS AND SUPPORT

You have access to a dedicated team of engineers who can be reached by phone and email. You also have access to the SiRF Customer Zone where you can download the latest GPS software, software tools, and documentation plus other materials related to your SiRF Evaluation Kit. The SiRF Customer Zone is easy to use and it is accessible anywhere and at anytime.

WORLDWIDE SALES OFFICES



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