### **GIR1450** Specifications

| Receiver Specifications |  |  |
|-------------------------|--|--|
| Internal GPS Engine     |  |  |
| Frequency               | 1.575 GHz (L1)                               |  |
| Horizontal Accuracy     | <1m (RMS)                                    |  |
| Channels                | 12 x L1 with 2 internal DGPS corrections     |  |
| Citamieis               | 12 X ET WITH 2 III terrial BGI G corrections |  |
| Internal L-Band Sensor  |  |  |
| Frequency               | 1.525 to 1.585 GHz                           |  |
| Tuning Mode             | Manual or Automatic                          |  |
| Sensitivity             | 120 dBm for <10-3 BER                        |  |
|                         |  |  |
| Internal Beacon Sensor  |  |  |
| Frequency               | 283.5 to 525.0 kHz                           |  |
| Cold Start Time         | <1 min (typical)                             |  |
| Reacquisition Time      | 2 sec (typical)                              |  |
| Channels                | 2  |  |
|                         |  |  |
| Physical                |  |  |
| Weight                  | .54 kg (1.2 lb)                              |  |
| Size                    | 160 mm L x 114 mm W x 45 mm H                |  |
|                         | (6.3" L x 4.5" W x 1.8" H)                   |  |
|                         |  |  |
| Environmental           |  |  |
| Operating Temperature   | -32°C to +74°C (-25°F to +165°F)             |  |
| Storage Temperature     | -40°C to +85°C (-40°F to +185°F)             |  |
| Humidity                | 95% non-condensing                           |  |
| Shock                   | EP 455                                       |  |
| EMC                     | FCC Part 15, Subpart B, Class B CISPR 22     |  |
|                         |  |  |
| Power Requirements      |  |  |
| Power Input             | 8 to 36 VDC                                  |  |
| Power Consumption       | 3W   |  |
| Current Consumption     | < 250 mA @ 12 VDC                            |  |
| Batteries               | 12v SLA battery sticks (x2)                  |  |
| Operating Time          | Up to 12 hours                               |  |

| External Ports                 | 2 x RS232, 1x power, 1x antenna              |
|--------------------------------|--|
| Standard Input/Output formats  | RTCM SC-104, NMEA 0183                       |
|                                |  |
| Antenna Specification          | ons  |
| Physical                       |  |
| Weight                         | .5 kg (1.1 lb)                               |
| Size (d x h)                   | 14.1 cm x 12.7 cm (5.6 in x 5.0 in)          |
| Environmental                  |  |
| Operating Temperature          | -40°C to +85°C (-40°F to +185°F)             |
| Storage Temperature            | -40°C to +85°C (-40°F to +185°F)             |
| Humidity                       | 100% condensing                              |
| Power Requirements             |  |
| Power Input                    | +5 to +15 VDC                                |
| Input Current                  | 50 to 60 mA                                  |
| IMap Minimum Specifications    |  |
| Operating System               | Microsoft Windows® CE, CE.NET,               |
|                                | Windows® Mobile 5.0                          |
| Memory                         | 32MB RAM                                     |
| Ports                          | 1x RS232                                     |
| Display                        | 240 x 320 resolution (portrait or landscape) |
| IMap Recommended Specification | ns   |
| Operating System               | Microsoft Windows® CE, CE.NET,               |
|                                | Windows® Mobile 5.0                          |
| Memory                         | 64MB RAM                                     |
| Ports                          | 1x RS232, Bluetooth                          |
| Display                        | 240 x 320 resolution (portrait or landscape) |

#### **SOKKIA** Worldwide

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# SOKKIA

#### Your Authorized SOKKIA Distributor Is:

# SOKKIA

## **GIR1450**



L1 DGPS System

### **GIR1450**

#### L1 DGPS System

SOKKIA's GIR1450 is the ideal system for mining, navigational, agricultural and hydrographic applications. At the center of the system is a high-performance, 12-channel, L1 DGPS receiver delivering sub-meter accuracy. The receiver also offers beacon, OmniSTAR, WAAS/EGNOS and other SBAS technologies for differential corrections and reliable positioning. The GIR1450 is lightweight and easy to set up and use, and it is rugged enough for your most demanding field work.



Rugged. Reliable. Versatile.



#### **GIR1450** Features

#### Reliable accuracy.

- · Delivers consistent sub-meter accuracy
- Features beacon, OmniSTAR, WAAS/ EGNOS and other SBAS technologies for differential corrections and reliable positioning
- Post-processing software options available for further refinement of positions

#### Lightweight, rugged design.

- Receiver weighs just .54 kg (1.2 lb); antenna weighs only .5 kg (1.1 lb)
- Receiver can withstand a drop of 2.0 m (6.6 ft)

#### Reliable power.

 Rechargeable batteries provide enough power for a full day of uninterrupted surveying

#### Easy to use.

- Convenient LED indicators provide information for power, GPS lock and DGPS lock
- Functional LCD panel allows you to navigate menus and configure receiver settings without using external software

#### Versatile performance.

- Receiver can be placed conveniently in the ergonomic backpack or mounted inside the cab for navigational applications
- Optional Bluetooth® adaptor available for cable-free surveying convenience



#### **Data Collection**

#### IMap data collection software.

- Provides comprehensive mapping tools
- · Simple interface and intuitive workflow
- Offers up-to-the-second positional information
- Easy-to-interpret graphical displays

## Spectrum Survey Suite post-processing software. (optional software/not included)

- Complete Windows®-based software package
- Supports commonly used methods of survey data collection, including static, rapid-static, kinematic and stop-and-go
- Provides all the tools you need to manage your project – from planning to processing, adjusting and analyzing GPS surveying data



#### The GIR1450 System

- 12-channel, L1 DGPS receiver featuring internal beacon, WAAS/EGNOS, OmniSTAR and other SBAS technologies for differential corrections
- Microsoft Windows® CE data collector with IMap data collection software
- GIR1450 antenna
- Ergonomic backpack



#### The SOKKIA Difference

SOKKIA has been developing advanced products for surveying professionals around the world since 1920. We are very proud of our **heritage**. It is our mission to provide you with products of the highest **quality** so you can do the job right the first time – every time. And we **support** our products long after the sale is complete. With that kind of **value**, it is no wonder surveyors everywhere count on SOKKIA for their most important projects.

