

GIR1600 Versatile DGPS Receiver

■ Specifications

Receiver

GPS-SBAS Unit	
Frequency	L1 (1575.42MHz)
Channels	12 Channels (10GPS / 2 SBAS)
Position Accuracy ^{*1} DGPS	Sub-meter (flat surface, 2σ)
Update Rate	1Hz (Option: 2Hz, 10Hz, 20Hz)
Beacon Unit ^{*2}	
Frequency	283.5 to 325.0kHz
Channels	2 Channels
Acquisition Time	Re-acquisition time <2 sec. typical
MSAS/Beacon Select	Manual, Automatic (selectable)
Frequency Interval	500Hz
Frequency Offset	±8Hz
Demodulation Method	Minimum Shift Keying (MSK)
General	
Interface	Bluetooth® Class 1 (range 10m, 30ft) Serial RS-232C compatible, 2 channels
Correction Input/Output Protocol	RTCM SC-104
Battery	BDC46A x 1
Operating Time	More than 5 hours per BDC46A ^{*3}
External Power Input Voltage Range	+6 to +40V
Power Consumption	2.2W
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Operating Temperature	-30°C to 70°C (-22°F to 158°F) BDC46A from -10°C (14°F)
Humidity	100% condensing
Environmental Protection	IP55
Size	147 x 100 x 40mm (5.8 x 3.9 x 1.6in)
Weight incl. Battery	460 g (1.0lb)

Antenna

Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Operating Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	100% condensing
Dust/Water Protection	IP57
Size	Ø104 x 22mm (4.1 x 0.87in)
Weight	100g (13.5oz)

^{*1} Accuracy depends on multipath effects, atmospheric conditions and satellite geometry (DOP).

^{*2} MF beacon antenna optional.

^{*3} Receiving beacons and using **Bluetooth®**, 25°C (77°F).



Standard Accessories

GPS antenna GSA3, Antenna adapter attachment SB181, Interface cable DOC120, BDC46A rechargeable battery x 2, CDC68 quick charger, EDC113 power cable, CD-ROM*, Operator's manual

*CD-ROM includes software and program instructions

Optional Accessories

Trekking Set

Shoulder pad SDB4-P, Shoulder belt SDB4-B, Soft case SC221
Antenna holder SB186, Antenna cable (1.5m, 4.9ft) GIR16-015

Survey Set

Surveying pole*, Pole attachment*

Backpack Set

Backpack (with telescoping aluminum pole) SC222, Beacon/GPS antenna R80D-AN3, TNC-LEMO cable GIR16A, Antenna cable (3.5m, 11.5ft) GSR26-03

Car mount magnet and AC adapter are also available.

Please consult your local SOKKIA representative for option availability.

*Surveying pole and pole attachment may vary according to region.

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SOKKIA

GIR1600

Versatile DGPS Receiver

**The Different Differential**

Sokkia is a sponsor
of the International Federation
of Surveyors. **FIG**

The Different Differential

GIR1600 is a versatile compact sub-meter accuracy DGPS receiver. Its innovative design offers unprecedented usability.



Wearable DGPS

GIR1600 has the industry's smallest and lightest design*. An innovative design makes GIR1600 a revolutionary "Wearable GPS".

*Detachable antenna DGPS receivers as of November 2006 (Source: SOKKIA)



*Anywhere
Nav!*

Detachable Antenna

The industry's lightest (100g, 13.5oz) and versatile detachable antenna allows you to comfortably take measurements wearing the lightweight trekking sling and enjoy the added benefit of unrestricted hand movement. Mobile mapping is possible by mounting the antenna to the roof of a vehicle using the optional car mount set. Of course, the GIR1600 can be attached to poles giving you the freedom to choose the best method for the job.



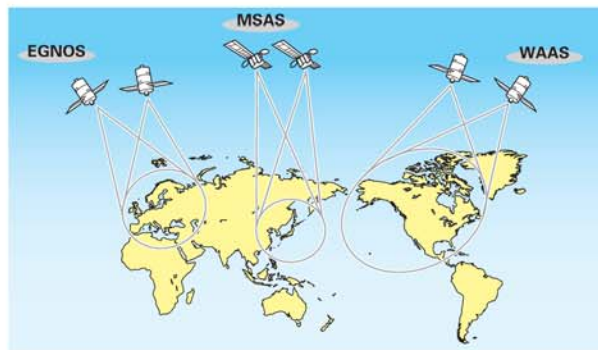
Trekking Set

High-Performance GPS with Integrated Real-Time Corrections

GIR1600 features a single integrated SBAS (WAAS, EGNOS, MSAS*) and MF beacon receiver**. In areas where correction data from radio beacons is not available, DGPS is possible using WAAS/EGNOS/MSAS for real-time sub-meter DGPS.

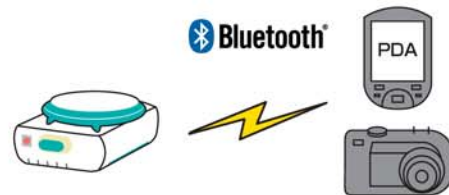
* MSAS available in spring 2007

** MF beacon antenna optional



Integrated Bluetooth® Wireless Technology

Enjoy a cable-free connection with your PDA, digital camera, and other Bluetooth®-enabled devices.



Multi-Faceted Positioning Solution

- GIS Data Collection
- Asset Maintenance
- Asset Inventory
- Utilities (Electric, Gas, Water)
- Mobile Mapping (Facility, Forest)
- Marine Survey
- Environmental Survey
- Agriculture GIS

...and more!



Actual size

Power Button

Easy operation. One push and you are ready to go.

Communication/Power Port

Connect to a PC* for prolonged measurement and connection with non-Bluetooth® devices. *A RS-232C cable is required for a PC connection.

Battery

GIR1600 comes with two rechargeable Li-ion BDC46A batteries, the same as SOKKIA total stations and digital levels.

Threaded Pole Mount

Standard camera-mount 1/4" threads.

Status LEDs

See GPS and correction signal status at a glance.

Pole/Antenna Adapter

For use with surveying range poles.

