

SOKKIA™

GSR2100

DUAL-FREQUENCY GPS RECEIVER



Sokkia's GSR2100 provides high-precision GPS measurement, and is upgradeable to real-time kinematic capability.

Performance

Sokkia's GSR2100 (Global Surveying Receiver) provides outstanding surveying and mapping application performance. The GSR2100 can be used for kinematic, rapid static and static surveys. 12-channel "all-in-view" operation, full wavelength carrier on L1 and L2, and full upgradeability make the Sokkia GSR2100 an ideal solution for most surveying applications.

The GSR2100's menu-driven displays and set-up screens are designed to provide maximum survey control with a minimal learning curve.

Anti-Spoofing Mitigation

Patented Z-Technology within the GSR2100 provides real, breakthrough performance by allowing uninterrupted use—even when Anti-Spoofing (AS) is turned on. The GSR2100 automatically activates its Z-Tracking™ mode to mitigate AS when AS is turned on; when AS is turned off, the GSR2100 automatically switches back to P-code mode.

On-The Fly Initialization

GSR2100 data initializes while the receiver is moving to provide centimeter-level-accurate post-processed positions for optimum efficiency in topographic surveying, photogrammetric flights and other applications.

Surveying Performance

The GSR2100's dual-frequency reception eliminates the effects of ionospheric interference, which allows for accurate measurement of medium to long-range baselines. Centimeter accuracies on one-mile baselines using one-minute occupation times have been achieved with the GSR2100 in Z-Tracking mode.

Dual-line digital processing capability substantially enhances jam immunity over other single-bit receivers. The GSR2100 GPS Receiver reduces the possibility of losing lock around transmitters or high-voltage power lines, so you stay productive in those areas.

Upgradeability

Options that can be added to the GSR2100 include:

- GSR2200 Base or Rover real-time kinematic capability;
- waypoint navigation;
- real-time data outputs;
- two RS-232 ports;
- 1 PPS timing signal; and
- expanded internal memory.



GSR2100 Specifications

Accuracy

Static (horizontal) 5mm + 1 ppm
Kinematic 2cm + 1 ppm
Real-time Differential Position
<1 m rms (PDOP <4)

Environmental

Waterproof to 5 psi
Temperature Ranges
Receiver/Data Logger
Operating -4° to +131°F
(-20° to +55°C)
Storage -22° to +167°F
(-30° to +75°C)
Antenna
Operating -40° to +149°F
(-40° to +65°C)
Storage -67° to +167°F
(-55° to +75°C)
Humidity 100%
Weight
Receiver 8.0 lbs(3.6 kg)
Antenna 3.75 lbs(1.69kg)

Speed (Max)—Does not exceed
1,000 nautical miles-per-hour
Altitude (Max)—Does not exceed
60,000 ft.

Higher altitude and velocities up to
25,000 nautical miles-per-hour
options are available in the U.S.
and under validated export license
for other countries.

Standard Features

- 12 Channel "all-in-view" operation
- Automatic Switching to Z-Tracking when AS is activate
- Full wavelength carrier on L1 and L2
- 12 Watt power consumption
- 2 power (10 - 32V DC) inputs
- Audible alarm for low power
- Internal RAM data recorder
- 8-line by 40-character display
- 2 RS-232 ports (115,200 baud max.)
- Static, rapid static, kinematic, pseudo-kinematic surveys
- Cold start: 2 minutes to first data
- Warm start: <30 seconds to first data

Standard Accessories

- External power cable
- RS-232 data cable
- Battery (7 hr. operation) and charger
- High-impact shipping case
- Receiver operating manual

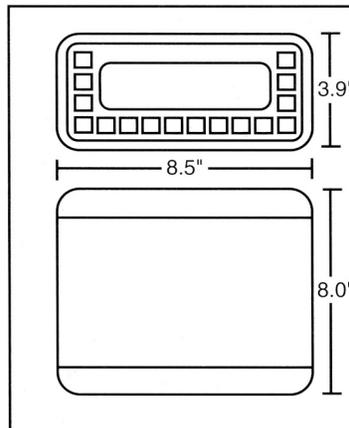
Optional Features

- Real-time kinematic*
- Real-time data output*
- Waypoint navigation
- Photogrammetry input
- 1 PPS timing signal
- External frequency standard input 1 to 20 MHz in 10KHz steps
- Real-time differential GPS RTCM format
- Expanded internal memory
- 2 additional RS-232 ports
- * Required for real-time operation

Optional Accessories

- Choke Ring Antenna
- Precision Geodetic Antenna Kit
- Marine Antenna Kit
- Aircraft Antenna Kit
- Survey Tribrach
- Rotatable Tribrach adaptor
- Kinematic bipod and pole
- 10-, 30- and 60-meter antenna cable; expandable to 150 meters w/ line amps
- External battery
- Battery charger 110/120V AC
- GSPRO-2000 Software Package

Dimensions



SOKKIA CORPORATION

9111 Barton, Box 2934
Overland Park, KS 66201 USA
Tel: 1-800-4-SOKKIA or (913) 492-4900
Fax: (913) 492-0188

Sokkia is a trademark of Sokkia. Z-Tracking and PNAV are trademarks of Ashtech Inc.