

# SDR®33 GPS/RTK CONTROLLER

## *Features, Functions and Benefits*

Now the SDR33 comes equipped with software that lets you collect both traditional surveying and GPS/RTK data. The new SDR33 GPS/RTK Controller Software means your SDR works with both Sokkia SET Total Stations and GSR2200-Series GPS Systems. Expand your job options with a single product. Collect topographic data, set-out data and perform computations with the new SDR33 GPS/RTK Controller.

- If you've ever used an SDR33 Electronic Field Book with your total station, you already know how easy it is to use. The real-time kinematic GPS functionality operates the same way as a traditional SDR33.
- Minimize your learning curve by using the same workflow for both total stations and GPS. Switch back and forth between conventional surveying instruments and GPS systems, or alternate between the two within the same job. It's like two products in one.
- Increase productivity with GPS by using the SDR functionality, speed and ease of use. No need to learn complicated new procedures, no incompatibility problems. Data is easily exportable in the industry-standard SDR format.

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### **Advantages of the SDR33 with GPS/RTK Controller Software include:**

- **Combine Total Station and GPS Data**  
Simplify data collection procedures and improve the efficiency of your surveys by combining total station data with GPS data. The difference between using a total station and using GPS is virtually transparent. Use the same control points, or control jobs with either measurement device. Collect GPS data in the open areas; then connect the SDR33 to a total station to pick up additional points under trees. Simply establish the station position and the backlight using GPS before setting up the total station.
- **Easy GPS Receiver Set-Up**  
Save time and effort by only using the SDR33 on the Rover. There's no need to hook the SDR33 up to the Base receiver. The Base receiver can be quickly and easily set-up at an optimal location because the base position and data recording configuration is controlled from the SDR33 at the Rover.
- **Configured for Productivity**  
The data recording configuration promotes maximum productivity in the field. Eliminate returning to the configuration screen when switching between single points and continuous data collection by setting separate data recording rates for each. Choose to stop the recording based on time, number of measurements, accuracy, or manually. Indicate dynamic level and recording mode to improve accuracy and efficiency.
- **Improve Accuracy with Tolerance Values**  
Improve reliability of your GPS solution by setting tolerance values for horizontal accuracy (HRMS), vertical accuracy (VRMS), total accuracy (Total RMS), number of common satellites, and satellite geometry (PDOP, HDOP, VDOP).



■ **Flexible Communications**

The SDR33 GPS/RTK Controller Software is flexible enough to work with many software packages. Use Sokkia's Windows™-based communications package to transfer data; or, use your various mapping software packages that currently read the SDR33 format to transfer data. Sokkia's communication software can convert the SDR data into various formats for export to nearly any mapping software. Choose to transfer the angles and distances and/or the positions.

■ **View GPS Status**

Improve your understanding of the real-time kinematic GPS system by viewing the status on the SDR33. View current satellite geometry, accuracy, position, heading, number of common satellites, satellite location, satellite health, and the status of the radio link.

■ **Easy Local Calibration**

Easily set-out data and check control points on a local coordinate system by using the local calibration capability. Calibrate on one point or many points, depending on the amount of reliability required. To accommodate various control stations and benchmarks, calibrate horizontal and vertical points together or separately. For increased efficiency, add control points to the calibration at any time before, during or after the survey in order to improve the accuracy.

■ **COGO Support**

The SDR33 supports various coordinate geometry functions for simple calculation in the field. Compute inverses, areas and intersections.

■ **Static, Rapid Static and Kinematic Surveys**

Use the SDR33 GPS/RTK Controller Software to easily automate GPS data collection in postprocessed surveys.

■ **Easy GPS Topography**

It's remarkably easy to record data in the topographic mode. The SDR33 prompts you for the station position when starting out, just like it would with a total station. After accepting the station position, record individual points or continuous data. The feature code field, automated point numbering, antenna height, accuracy, and current status are displayed to simplify data recording. Use the same feature codes you're familiar with to automate mapping procedures. Use the offset function to record positions for unreachable points. Simply press one function key to view the status screens or change the configuration.

■ **Set-Out Options**

The SDR33 supports staking out points, points on lines, points on arcs, and parallel offsets. Simplify design or as-built surveys by navigating along lines to design points and recording line and arc offsets.



Minimum memory capacity: 640K SDR33. For GPS system requirements, refer to the appropriate GSR2200 Series product brochure.

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