

Leica SR20 Single Frequency Survey Solution



- when it has to be **right**

Leica
Geosystems

The Power of Leica GPS



The SR20 from Leica Geosystems has the power and flexibility to perform a wide range of land surveying tasks in the size of a handheld receiver.

Powerful Features

The Leica SR20 GPS data collector gives you an easy to use, rugged GPS receiver with the power to complete a variety of surveying tasks. The SR20 is capable of accurate static and kinematic surveys, real-time data collection using Satellite Based Augmentation Systems (SBAS) like WAAS and EGNOS, and much more.

- Powerful 12-channel GPS engine that yields centimeter results in post-processing mode
- Flexible to meet your land surveying requirements
- High quality L1 carrier phase measurements
- Comprehensive system includes survey workflow and applications
- Complete solution includes Leica Geo Office Software for powerful post-processing capabilities

Powerful Functionality

The SR20 is designed for the land surveyors and their workflow. The handheld software provides a simple interface with an intuitive workflow making the SR20 easy to learn and use. All this without sacrificing any functionality or configurations a power GPS user requires.

The SR20 comes standard with Leica Geo Office processing software. The most powerful GPS software in the industry today, the user-friendly software provides everything required for managing, visualizing, processing, importing and exporting SR20 GPS data.

Equipped with a high-resolution display, you can use the SR20 in all light conditions. A mobile phone styled keyboard provides intuitive data entry and removable,

rechargeable batteries ensure the receiver can stay in the field as long as you do. And because the SR20 is handheld receiver, it is portable and easy to take along to all job sites.

Available in one and two receiver bundles, the SR20 system includes all necessary accessories to start working. Included is Leica's high accuracy antenna. This antenna is very rugged and tracks extremely well in even difficult GPS conditions.

And a Powerful Promise

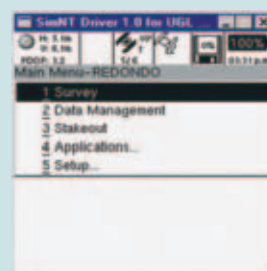
You know you are getting an industry-leading technology solution because the SR20 comes from Leica Geosystems. Known throughout the world for precision and accuracy, the people at Leica Geosystems have been delivering on the promise of technology excellence for nearly a century.

The SR20 is a simple, yet powerful, GPS receiver

The SR20 is a comprehensive solution to meet the many demands facing today's surveyor. Combining ease of use, durability and powerful features all with proven Leica Geosystems GPS technology, the SR20 is today's answer for smart surveying and GPS data collection.



COGO Inverse -
COGO Application



Main Menu -
Easy to Use



Data Management -
Map Display

One Solution to meet your Surveying Needs

Configurable for a variety of jobs tasks, the SR20 can be set up as a reference station, a static and kinematic receiver, a navigator to locate monuments, and can even be upgraded to the GS20, for feature and attribute GIS data collection. In addition, you can expand your functionality anytime by connecting to a variety of external devices via **Bluetooth®** or serial interface. Coast Guard Beacon, GSM mobile phones, and other real-time solutions are optionally

available. The SR20 includes several application programs that can be used for a variety of operations to achieve optimal results.

Having this flexibility allows you handle a variety of common tasks such as:

- Control monuments surveys
- Topographic data collection
- Locate monuments
- GPS networks
- Asset Management
- GIS data collection



The SR20 being used to collect sub-meter accurate utility features.



The SR20 being used to collect centimeter accurate topographic data using kinematic techniques.

Specifications	SR20
Size	21.5 cm L x 9 cm W x 5 cm D: 8.46" x 3.54" x 1.97"
Weight (With Battery)	0.652 kg or 1lb 7oz
Power	2.1 Watt (typical) at 20° C, 7.2 V internal, 12 V external
Receiver	12 channel parallel automatic selection. L1 Code / Phase
Antenna	Internal: Leica AT575 microstrip, built-in groundplane External: Leica AT501 microstrip, built-in groundplane
Casing	Sealed polycarbonate housing; protection against wind driven rain and dust. Sealed battery compartment and sealed compact flash. IP54 Rating
Processor	240 MHz RISC floating point processor
Display	240 x 240 pixel graphical LCD, 16 grayscale with backlight
Internal Radio	Bluetooth®
Keypad	Front: Metal dome with high tactile feedback, protected on/off Side: Duplicate up, down and enter keys
Memory	ATA compact flash: Standard 32 MB; Max 2 GB
Data Transfer	RS232 Lemo, ATA compact flash
Internal Ports	RS232 Serial: 7 pin Lemo; Antenna Coaxial Lemo
Operating Temperature	-20° C to 55° C / -4° F to 122° F
Storage Temperature	-40° C to 75° C / -40° F to 167° F
Humidity	99% non-condensing
Shock	1.2 m drop
Baseline rms (Post-processing)*	L1 Code only: Typically 30 cm (rms) L1 Code and Phase typically 5 to 10 mm + 2 ppm (rms)
DGPS/RTCM	RTCM version 2.1 (9,2 & 1,2) Optional support for Coast Guard Beacon differential correction
Baseline rms (DGPS/RTCM)*	L1 Code only: Typically 40 cm (rms)
Data Recording Rate and Capacity	At 1 Hz measurement; 1 hour runtime = 2 MB, 16 hours continuous measurement per 32 MB standard compact flash
Desktop Software	Leica Geo Office; L1 Code and Phase Post-Processing, ASCII export, import and export to dwg, dxf, dgn and mif
Application	Data Collection, Data Management, Stakeout, COGO
Battery	Lithium-Ion 7.2 Volt 2100 mAh w/microprocessor
Charger	Battery charger

*Baseline rms refers to accuracy in position. Accuracy in height is 2x accuracy in position. Figures are for normal to favorable conditions.

Standard Configurations
Each SR20 is packaged in its industrial-strength storage and travel case, and is delivered assembled and ready for use. The SR20 GPS Receiver can be purchased in One or Two unit packages. These packages consist of the following pieces:
SR20 Package
SR20 GPS Receiver
External GPS Antenna
Antenna Cable
SR20 Holster
SR20 Pole Bracket
Storage and Travel Case
Li-Ion Batteries
Charger
Data Transfer Cable
Leica Geo Office Software
Set of Documentation

Whether you want to map the location of a power pole, the run of a pipeline, the area of a building or a farm; whether you are downtown or out in the country; whether you want to collect new features, or update and maintain the data from your Enterprise or Geographic Information System: For collecting, verifying and updating geographic data or an as-built of civil infrastructure models, Leica Geosystems offers the right solution – with seamless data exchange between field and office, for GIS or CAD workflow.

When the data really counts, Leica Geosystems offers the right combination of hardware and software: Field-proven sensors use up-to-date technologies including terrestrial and satellite data collection and navigation, distance measurement devices, scanners and airborne sensors. Our wide range of software solutions for field and office usage is compatible, scalable and flexible, with the accuracy and reliability that you need.

When it has to be right.

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**Total Quality Management –
Our commitment to total
customer satisfaction**

Ask our local Leica Geosystems dealer for more information about our TQM program.

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Leica GS20 PDM
Product brochure