

GSR2650 LB Receiver Specifications

Position Accuracy¹		
Single Point		
L1	1.8 m CEP	
L1/L2	1.5 m CEP	
WAAS/EGNOS		
L1	1.2 m CEP	
L1/L2	0.8 m CEP	
OmniSTAR²		
VBS	1.0 m CEP	
HP	10.0 cm CEP	
RTK ³	10.0 mm + 1 ppm (horizontal)	20.0 mm + 1 ppm (vertical)
Kinematic, Stop-and-Go ⁴	10.0 mm + 1 ppm (horizontal)	20.0 mm + 1 ppm (vertical)
Channels		
	12 x L1 and 12 x L2 with full code and carrier	
Time to First Fix		
Cold Start	50 sec	
Signal Reacquisition	0.5 sec L1; 1.0 sec L2	
Data Rate	20 Hz	
Physical		
Weight	1.1 kg	2.4 lb
Size (l x w x h)	18.0 cm x 15.4 cm x 7.1 cm	7.1 in x 6.1 in x 2.8 in
Environmental		
Operating Temperature	-40° C to +75° C	-40° F to +167° F
Storage Temperature	-40° C to +90° C	-40° F to +194° F
Water Resistance	IPX4, IPX7	
Shock ⁵	1.0 m drop	3.3 ft drop
Power Requirements		
Power Input	+7 to +15 VDC	
Logging	5 W typical (operating)	
Batteries	2 x 2300 mAh camcorder batteries	
Operating Time	8 to 12 hours	
External Ports		
	3 x RS232, 1 x power, 1 x antenna	
Standard Input / Output Formats		
	RTCA, RTCM, CMR, NMEA-0183 out, PPS out, Mark In	
SK-600 LB Antenna Specifications		
Operating Temperature	-55° C to +85° C	-67° F to +185° F
Storage Temperature	-55° C to +85° C	-67° F to +185° F
Weight	0.7 kg	1.6 lb
Water Resistance	IPX7	
Shock and Vibration	MIL-STD-810F method 514.5, Salt Spray: MIL-STD-810F method 509.4	
Phase Center	L1 and L2 phase center in same location (zero offset)	
Multipath Performance	Choke ring-like performance. Pinwheel™ technology to provide exceptional multipath rejection.	
Ground Plane	Built-in	

1. Accuracy depends on the number of satellites used, obstructions, satellite geometry (DOP), occupation time, multipath effects, atmospheric conditions, baseline length, survey procedures and data quality.

2. Accuracies dependent on distance from OmniSTAR base station and if receiver is within coverage zone specified by OmniSTAR.

3. 1 Sigma.

4. 95% confidence level.

5. Shock specifications based on receiver without cables attached.

Design and specifications are subject to change without notice.

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GSR2650 LB



L1 / L2 GPS L-Band System

HERITAGE | QUALITY | SUPPORT | VALUE

GSR2650 LB

L1 / L2 GPS L-Band System

The GSR2650 LB is a unique GPS system that offers the ability to perform GIS and RTK applications within one system. The receiver is capable of utilizing OmniSTAR HP, OmniSTAR VBS and WAAS corrections and can deliver centimeter-level results in RTK mode. The flexibility of the GSR2650 LB allows you to switch from GIS to RTK modes without having to switch equipment. The system, with its modular design, is extremely easy to set up and even easier to use and is durable enough to withstand even the harshest environments.



Versatile. Reliable. Functional.



GSR2650 LB Features

Versatile design.

- Perform GIS or RTK surveying applications without switching equipment
- Equipped to receive OmniSTAR HP, OmniSTAR VBS and WAAS corrections

Extremely accurate.

- Utilize OmniSTAR HP to achieve decimeter-level results as a stand-alone DGPS and centimeter-level results in RTK
- OmniSTAR VBS and WAAS/EGNOS deliver submeter accuracies for GIS applications

Rugged performance.

- Lightweight receiver is 1.1 kg (2.4 lb)
- Dustproof and waterproof
- Able to withstand a drop of 1.0 m (3.3 ft)

Advanced technology.

- Dual-frequency SK-600 LB antenna features Pinwheel™ Technology, which decreases errors associated with multipath and electromagnetic interference
- Exceptional positioning performance for outstanding efficiency

Easy to operate.

- Simple setup for base or rover operations
- Comes complete with camcorder batteries for 8-12 hours of continuous surveying



GSR2650 LB System

- High-performance, dual-frequency GPS receiver
- SK-600 LB dual-frequency GPS antenna
- Microsoft Windows® CE data collector with IMap or SDR Level 5 software
- Ergonomic backpack



Data Collection

SDR Level 5 data collection software.

- Workflow is designed to follow a logical field collection process
- Offers topographic surveying, stakeout, roading and coordinate geometry (COGO)
- Processes a wide range of GPS and Total Station sensors
- Runs on multiple platforms, including Allegro CX™

IMap data collection software.

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



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.