

LINERTEC

LGN-200S Positioning System

Precision satellite surveying
with wireless communications

GPS / GLONASS / BEIDOU



- Single, rugged housing with all components for field survey and stake out
- State of the Art 136-channel XXB2 receiver board with GPS, GLONASS and BEIDOU
- Integrated satellite antenna for optimized satellite tracking
- Base or Rover configuration for standard equipment use
- Internal GSM Modem for connection to Real Time Networks
- Internal UHF Radio for RTK ready units
- Easily removable SD Card for new Data Logging
- Bluetooth on-board for a cable free controller
- Rugged field controller for efficient field survey
- Optional External Radio for greater transmission range
- Two Hot Swap Li-Ion batteries for continuous operation and intelligently switchable
- Power Supply via cable for long sessions
- Open interface protocols for various types of handheld

GNSS SPECIFICATIONS

The LGN-2005 features the XXB2 GPS/GLONASS/BEIDOU dual frequency receiver, the latest entrant to the high precision positioning market. The XXB2 engine includes RAIM and provides outstanding performance for Survey and GIS applications.

Model	LGN-2005	
Channel Configuration	136 channels (dual frequency) for GPS, GLONASS, BEIDOU and SBAS	
Single Tracked	GPS	L1-C/A, L1-P(Y), L2-P(Y) and L2C
	GLONASS	L1-C/A, L2-C/A
	BEIDOU	B1/B2
Position accuracy	HORIZONTAL	VERTICAL
	Standalone	1.3 m
	SBAS	0.6 m
	DGPS	0.5 m
RTK Performance	Horizontal Accuracy	6 mm + 0.5 ppm *1
	Vertical Accuracy	10 mm + 1 ppm
	Average Time to Work	7 sec.
	Availability	99.99%*1 (Baseline < 20km)
Static Performance	Horizontal Accuracy	2 mm + 0.5 ppm
	Vertical Accuracy	5 mm + 0.5 ppm
Ports	Lemo 5-pin, serial port for Handheld PC (RS232C)	
	Lemo 8-pin, serial port for external radio/modem	
	Lemo 4-pin for external power (+9VDC - +15VDC)	
Internal Radio Modem*2	Frequency	403-473 MHz
	Output Power	Max. 1W
GSM/GPRS Modem	Protocol	NTRIP
Power	Internal Battery	2 x Li-Ion (Swappable), 2500 mAh, 7.4V
	Battery Running Time	Approx. 10 hours with 2 Batteries
Weight	1.4 kgs with 2 batteries	
Dimensions	198.5 mm x 197.5 mm x H 99 mm	
Environmental Specifications	Operating Temperature	-30°C to +70°C *2
	Storage Temperature	-40°C to +75°C
	Shock/Drop	2 m
Velocity Accuracy	HORIZONTAL	VERTICAL
	Standalone	2 cm/sec
Data Output	25Hz data output rate (User selectable)	
	NMEA v2.3 output format, up to 10 Hz	
	RTCM SC104 v2.2, 2.3, 3.0 or 3.1	
	CMR2.0 and CMR+	
Latency	< 20 msec	
Time to First Fix	Cold Start	< 45 sec
	Warm Start	After power-on < 20 sec
		Re-acquisition < 1.2 sec
Bluetooth	Class 2	
RoHS	Compliant	
Waterproofing	IP67	
Certification	CE	
Accessories	Standard	2 x Li-Ion rechargeable battery pack
		Battery charger
		2 GB SD Card
		UHF radio antenna
	Option	Controller
		External power cables
		External radio/modem cable
		Carbon Pole

*1 GNSS precision and reliability are subject to anomalies due to multipath, obstructions, satellite geometry, and atmospheric conditions.

*2 Functional

*3 Receiver without Internal Radio Modem connected (model name LGN-2005) is optionally available.

Linertec Positioning System is dedicated to providing customers with first class positioning system products and freedom of choice. We have carefully designed high-quality products to meet the needs of today's surveyors based on the experience of many years involved in instrument design and construction. Our engineers have been involved in Survey products since the beginning of the Satellite Surveying Era. We are committed to ease of use, a low cost of ownership and flexibility to accommodate different working environments. Our close partners are carefully chosen and are committed to these values as we are.

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The CE marking assures that this product complies with the requirements of the EC directive for safety.