

iREF-L1L2

Advanced RTK GPS Reference Station

The iREF-L1L2 is a RTK GPS reference station which comes in a highly ruggedised water-tight enclosure and provides an autonomous power provision, an integrated wireless data modem and several interfaces like RS232, WLAN and USB.

- RTK GPS reference station, up to 20 Hz data rate
- data format: RTCA, RTCM etc.
- integrated radio modem (several power classes available) or GSM / GPRS data transmission
- autonomous operation over at least 12 hrs
- integrated battery charger for 12 V DC and 110/230 V AC
- water-tight ruggedised housing
- iREF-L1L2 comes with a L1L2 antenna and a heavy alu tripod
- Options: additional GLONASS data output, L-Band (Omnistar) and ASCOS aiding
- plug&play with iMAR's INS solutions

The iREF-L1L2 is equipped with sturdy connectors and is designed for autonomous operation. Two high density hot-plugging batteries allow a long time operation including radio modem. No external equipment is used to charge the batteries. The unit can

also operated continuously at an external power supply.

The iREF-L1L2 enclosure is designed to store the cables and the GPS antenna if the system is not in operation. In operational mode the GPS antenna is removed from the enclosure and mounted on a rugged aluminum tripod which is included also in the delivery. Options for data transmission are 433 MHz or 160 MHz band, GPRS, GSM or WLAN. To survey the position of the iREF-L1L2 in WGS84, correction data processing using Omnistar or



ASCOS or NTRIP is supported.

A Windows based configuration software is included to configure the iREF-L1L2 for up to 10 different locations.

Technical Data of iREF-L1L2:

RTK performance:	$\pm 1 \text{ cm} + 1 \text{ ppm CEP}$ (uninterrupted RTK mode with rover iROV-L1L2)
Data rate:	up to 20 Hz
Time to first fix:	typ. < 60 s
Interfaces:	USB (3 virtual COM ports), RS232, WLAN PPS (TTL, 50 ns accuracy)
Correction data support (option):	ASCOS (modem), Omnistar HP (for precise location determination)
GPS antenna:	NovAtel PinWheel (standard) or ChokeRing antenna
Radio Modem:	up to 19.2 kBd; power 0.5 ... 10 W, 433 MHz or 160 MHz (option)
Autonomous Operation:	> 12 hrs (if battery is fully charged; depends on power of wireless modem)
Additional parts included:	- Aluminum tripod for GPS antenna - Antenna mast for radio modem antenna - Cables for GPS antenna and radio modem antenna
Power:	10...14 V DC or 110...230 V AC (up to 120 W during battery charging);

iMAR GmbH • Im Reihersbruch 3 • D-66386 St. Ingbert / Germany
Phone: +49-(0)-6894-9657-0 • Fax: +49-(0)-6894-9657-22
www.imar-navigation.de • sales@imar-navigation.de