

GPS-Base

Portable GNSS base station

The GPS-Base is a portable GNSS base station that provides RTK corrections to one or more differential enabled GNSS receivers via radio modem. Correction data can also be logged to a PC when connected.

» Features

- 45 cm DGPS corrections
- 20 cm L1 corrections
- 1 cm L2 corrections
- RTCA, RTCA2 and RTCM and RTCMv3 correction formats
- Various radio modem options
- Error correcting transmission
- Save/Restore antenna position
- High performance, multi-path rejecting GNSS antenna
- Easy to power from a variety of sources
- Complete kit with carry case

» Compatibility

- RT1003
- RT3000
- RT4000
- RT-Split
- Survey+
- xNAV550
- Also compatible with other manufacturers' receivers supporting the correction message format

» Applications

- Useful in installations that require RTK corrections



» Quick to install

The GPS-Base has been designed with installation speed in mind. Simply connect the GNSS antenna and the radio modem aerial; then turn on. Simple software on the PC is used to configure the GPS-Base. The current location can be saved and restored or a new location can be set by averaging the GPS measurements.

» Flexible Power

The power can be supplied by a battery, a car cigarette lighter or a mains power supply. The GPS-Base accepts 9 to 36 V dc.

» Multipath Rejection

The GPS-Base uses pulse-aperture correlator technology to minimise the effects of multipath. The high performance antenna includes a ground-plane to minimise ground surface multi-path and reflections.

» Radio modem

Three different radio options are available. This allows a suitable radio to be chosen for license free operation. Advanced error correcting codes are used in the radio modem's communication to enhance reliability and minimise the number of corrupt packets.

The radio modem provides reliable transmission over a 2 km range in an open environment. Since some packets can be dropped or have errors, the radio modem can be used up to a range of 5 km in open environments.

For further information please contact OxTS or our nearest channel partner.

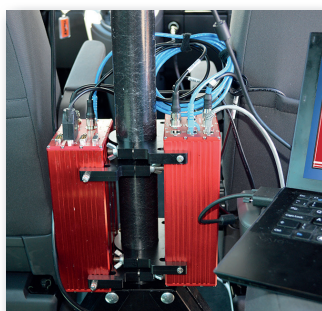
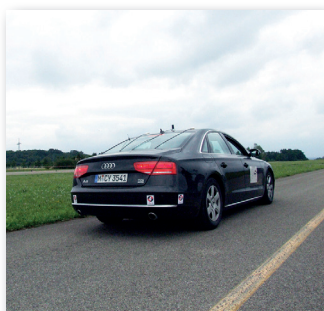
» Specifications

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|-----------------------|--|
| Power | 9–36 V dc, 2 W |
| Operating Temperature | –40 °C to 75 °C |
| Corrections | RTCA (Differential, L1, L2), RTCA2, RTCMv3 |
| Output frequency | 1 Hz |
| Format | RS232 |



» Radio modem options

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|----------|---|
| SATEL | 403–473 MHz band, up to 1 W, typically 5 km. License free bands available for many European countries. Radio will typically cover 8 bands with 25 kHz channel spacing |
| SATEL | 869 MHz band, up to 500 mW, typically 2 km. License free across most of European Union |
| Freewave | 900 MHz band, up to 1 W, typically >10 km. License free in USA, Brazil, Canada |



Document version: 180924. Specifications subject to change without notice.