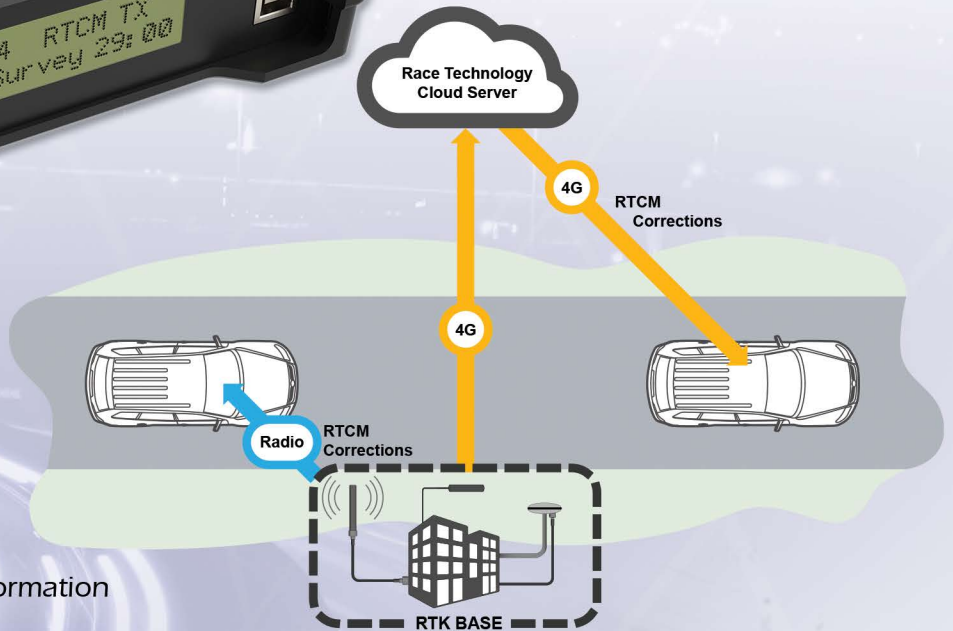


# RTK BASE - Compact Installed Base Station



- RTCM corrections for RTK 2-3cm positional accuracy
- Correction uplink to server for modem-free operation
- Accurate absolute position with no averaging
- LCD for comprehensive status information
- Compatible with SPEEDBOX and SPEEDBOX-INS products

The RTK BASE is a multi-constellation GNSS receiver capable of providing RTCM corrections via either a 4G LTE radio modem or via optional radio modem, to give 2cm absolute positional accuracy for a variety of testing applications. The system is designed to work with any of the Race Technology 2cm capable systems, or with any other GNSS receivers which require RTCM V3.x corrections.



System initialisation takes around 30 hours whilst the current position is recorded and the correct position calculated using a remote service. This is not position averaging and so will give high accurate absolute position. The system can be configured to resurvey periodically to account for ground movement. Correction information is only supplied to the server when required by an external unit, so data usage is kept very low. Full status information for the connection and satellite information is shown on the LCD.



The RTK BASE is designed for permanent installation and operation. Where portable operation is required look at the RTK BASE Portable.

# RTK BASE - Compact Installed Base Station

Using the RTK BASE with the RT CONNECT and SPEEDBOX-INS or CATS-INS gives all the benefit of the proven speed and attitude accuracy of the SPEEDBOX-INS, with the addition of positional accuracy upgraded from the 1m level to the 2-3cm level. This brings many more applications within the remit of the SPEEDBOX-INS / CATS system, including:

- Driving robot input
- Lane deviation testing
- Target tracking
- Driver assistance development and end-of-line testing (ADAS)
- Driverless vehicle research and development

<b>Correction format</b>	RTCM v3.x
<b>Update rate</b>	1Hz
<b>Modem - Serial</b>	RS232 @ 38400 baud. RTCM v3.x GPS #1074, #1077 GLONASS #1084, #1087, #1230 Galileo #1094, #1097 BeiDou #1124, #1127
<b>USB</b>	Configuration / reflash
<b>LCD</b>	Multi-screen information to show: Screen 1. Connection status, correction status Screen 2. GPS and Galileo information Screen 3. GLONASS and BeiDou information Screen 4. Current position Screen 5. RS232 baud rate and corrections Screen 6. Error messages
<b>SIM card format</b>	Micro-SIM (3FF)
<b>Voltage</b>	12V nominal input, minimum of 10V, maximum of 15V
<b>Power consumption</b>	3W
<b>Weight</b>	540g
<b>Dimensions</b>	163mm x 118mm x 34mm
<b>Antenna (Main and Aux)</b>	4G LTE compatible
<b>Antenna (GPS)</b>	Dual frequency multi-constellation pinwheel type.

Race Technology Ltd (UK)  
16 King Street, Eastwood, Nottingham, NG16 3DA  
Tel: +44 (0)1773 537620  
Fax: +44 (0)1773 537621  
Email: sales@race-technology.com

