

Telemetry Radios (EU)

(RLRTM868BS / RLRTM868TR)



The Racelogic RLRTM868BS / RLRTM868TR radio modules are designed for use with the VBOX range of products. Each module contains a high power radio modem capable of transmitting and receiving RS232 serial data.

Operating at 868 MHz, the radios can be used with a Base Station throughout the UK and Europe to provide DGPS corrections to a VBOX.

The **Base Station variant (RLRTM868BS)** is designed to connect to the Racelogic Base Station and transmit DGPS corrections to a remote VBOX.

The **VBOX variant (RLRTM868TR)** is designed to connect to a VBOX to receive DGPS corrections from a Base Station.



Transmission Range

- **Difficult environment (e.g. buildings, reinforced concrete):**
300 m (1,000 Feet)
- **Open environment with antennas at ground level (e.g. vehicle roofs):**
700 m (2,300 Feet)
- **In view with Base Station antennas at height (e.g. building roof):**
3,500 m (11,000 Feet)

Note: Obstacles such as walls and trees can greatly affect the range.

Features

- Powerful 500mW radio giving range up to 3500m
- Simple connection directly to VBOX (one cable)
- Each radio supplied with magnetic mounting antenna
- Uses 868MHz licence free radio band

Telemetry Radios (EU)

(RLRTM868BS / RLRTM868TR)



Specifications

Input Voltage	6 – 30V DC
Input Current - Receiving	<50mA
Input Current - Transmitting	<200mA
Radio Transmission Power	500mW
Base Station Duty Cycle	< 10%
Carrier Frequency	869.40 – 869.65MHz
Radio Data Rate	38,400bit/s
RS232 Data Rate	115,200bit/s (configurable)

Physical

Module Dimensions	95mm x 60mm x 33mm
Operating Temperature	-20°C to +60°C
Storage Temperature	-40°C to +85°C

Package Contents

RLRTM868BS

Description	Product Code
Base Station Transmit Radio Module	RTM868BS
VBOX Base Station Antenna	RLACS142-868
Base Station to Radio ¾ Cable	BSP-TELEMCAB
Base Station Radio Antenna Cable - SMA	BSP_RAD_SMA

RLRTM868TR

Description	Product Code
VBOX Transmit & Receive Radio Module	VBRTM4E
Serial PC Cable for Radio	RLCAB032
Antenna for Radio System	CABMAGDUAL
5 Way Lemo to 5 Way Lemo – 300mm	RLCAB006