

Technical Description of the TPMS (Tire Pressure Monitoring System) CRM (Commercial-vehicle Receiver Module) V1

Part Numbers Covered:

SEL P/N: 70503657

Brief Description

A block diagram of the TPMS CRM V1 is shown in figure 1. The ECU (Electronic Control Unit) has the following sections:

- RF circuit
- LIN transceiver
- Microprocessor
- Power Decoupling

The system has been developed to monitor a vehicle's tyre pressures. An electronic unit inside each tyre, (referred to as the TPMS transmitter), periodically measures actual tyre pressure. By means of RF communication, this pressure information is transmitted to the ECU (receiver) which is fitted in the car.

The ECU filters this RF in the RF section and decodes the pressure information via the microprocessor.

The Power Decoupling section is used to protect the ECU against transients etc on the VBat ECU inputs.

The LIN section is an interface unit for the ECU to communicate to the outside system on the vehicle.