

## **PRODUCT DESCRIPTION**

The Passive Entry / Passive Start system is designed to allow hands free unlocking of the vehicle doors and engine starting with a push of a button. The PEPS system will provide the means to detect the presence of a PK/CID keyfob by driving Low Frequency (LF) antennas in the vehicle's outside door handles, at the trunk, and within the interior of the vehicle. The PK/CID keyfob will respond to the LF challenge, and the Keyless Vehicle (KV) system will determine the location of any of the fobs that are within LF range. Based on the fob's location, the base station will unlock or lock doors, open the trunk, or allow starting of the vehicle at the push of a button on the vehicle's instrument panel. A second version of the PEPS system will not have the hands free entry functions but will only support the Passive Start feature. Both versions of the PEPS systems will also act as a gateway for standard RKE functions and will receive and pass along TPMS signals.

### **RF Receiver (RFR) Module**

The RFR unit is a microcontroller based module that connects to the RFA via a single wire ISO9141 interface bus to transfer data. The RFR contains a multi-channel RF receiver, and will capture and filter the RF responses from the PK/CID keyfob to a passive LF challenge, the RKE button requests from the PK/CID, and the tire pressure data messages from the TPMS sensors in the vehicle's tires.