

March 16, 2012

TEE
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RE: Certification for HKMC MY2012.5 YD/QD 315MHz TPM Sensor
Model #: 225816-116
FCC ID: GQ4-56T
Canada IC: 1470A-37T

GENERAL DESCRIPTION

This device is a transmitter/sensor with tire valve, which is mounted in the valve hole of the rim and measures the pressure inside the tire, as well as if the vehicle is in motion. These measurements are then transmitted over Radio Frequency (RF) to a receiver also located in the vehicle. The device also has a Low Frequency (LF) receiver. This receiver supports Low Frequency (LF) magnetic field communications allowing the changing of measurement/monitoring states of the transmitter by commands sent via the TPM diagnostic tool. The RF signal operates at 315MHz and uses FSK Manchester code modulation.

Description of Operation

| Sensor State/Mode | Description | Frequency of Transmission |
|--------------------------|--|---|
| Storage | Measures pressure. | Single 8-Frame TPS Message upon LF request. |
| Sleep | Measures pressure and motion. | Single 8-Frame TPS Message upon LF request. |
| Motion | Measures pressure and motion. Transmits periodically. | Single 8-Frame TPS Message at 16 second intervals for 1st minute after exiting Sleep State and then at 1 minute intervals or upon LF request. |
| Motion Alert | Measures pressure. Transmits when: a) significant pressure delta detected | 1 minute period of 4 second interval 8-Frame TPS Messages |
| Sleep Alert | Measures pressure and temperature. Transmits when: a) significant pressure delta detected with change in pressure to temperature ratio | 5 second cycle of 200ms period, 50% duty cycle Single-Frame TPS Message |
| Rest | Measures pressure and motion. | Single 8-Frame TPS Message upon LF request. |