March 14, 2013

GEE 24175 Research Dr. Farmington Hills, MI 48335-2642 Tel 248.478.7210 Fax 248.699.4241

RE: Certification for HKMC MY2013 315 MHz YD LM/SL FL TPM Sensor

Part Number: 225816-125, 225816-129

Model#: 64T FCC ID: GQ4-64T Canada IC: 1470A-45T

## 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 / temperature.	Single 8-Frame TPS Message upon LF request.
Sleep	Measures pressure / temperature and motion.	Single 8-Frame TPS Message upon LF request.
Motion	Measures pressure / temperature 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 / temperature and motion. Transmits when: a) significant pressure delta detected	1 minute period of 4 second interval 8-Frame TPS Messages
Rest	Measures pressure / temperature and motion.	Single 8-Frame TPS Message upon LF request.