

## **Section 15.247(i) – Radio Frequency Hazard Information**

As per Section 15.247 (i) spread spectrum transmitters operating in the 2400 – 2483.5 MHz band are required to be operated in a manner that ensures that the public is not exposed to RF energy levels in accordance with CFR 47, Section 1.1307(b)(1).

In accordance with Section 1.1310 this device would be classed as a portable device and therefore Section 2.1093 will apply.

Section 2.1093 requires SAR measurements to be carried out.

No SAR requirements will apply when the transmitter is attached to the dog.

However the transmitter may come into close contact with humans so a SAR evaluation has been carried out in accordance with KDB Publication 447498 D01 General RF Exposure Guidance v05 dated October 24, 2012.

Clause 4.3.1 1) has been applied to this device as the power output is very low.

At 2462 MHz the conducted transmitter output power was determined to be 1.251 mW

The 1-g SAR threshold level was calculated using a safe distance of 5 mm

$$1\text{-g SAR} = (1.251 \text{ mW} / 5 \text{ mm}) * (\sqrt{2.462 \text{ GHz}}) = 0.39$$

The 1-g SAR threshold level, for distances < 50 mm, is < 3.0.

The device will therefore meet the requirements of Section 2.1093 without any further testing by falling below the 1-g SAR threshold level.

**Result:** Complies