

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a 2 Axis Gimbal with Bluetooth function operating in 2402-2480MHz. The EUT is powered by a DC4.2V 5200mAh rechargeable battery via micro USB port which can be connected to adapter with 100-240VAC. For more detail information pls. refer to the user manual.

Modulation Type: GFSK

Antenna Type: Integral antenna (Gain: 0 dBi)

Bluetooth Version: 4.0

The nominal radiated output power (e.i.r.p) specified: 1dBm (Tolerance: +/-3dB)

The nominal conducted output power specified: 1dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 96.8dBμV/m at 3m in the frequency 2.440GHz = $[(FS \cdot D)^2 / 30]$ mW
= 1.57dBm which is within the production variation

The minimum radiated emission for the EUT is 95.8dBμV/m at 3m in the frequency 2.480GHz = $[(FS \cdot D)^2 / 30]$ mW
= 0.57dBm which is within the production variation.

The maximum conducted output power specified is 4dBm = 2.5mW

The source- based time-averaging conducted output power
= 2.5 * Duty cycle mW <= 2.5 mW (Duty Cycle<=100%)

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.53 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.