

Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Controller operating from 2420-2465MHz with 1MHz channel spacing for RC Drone. The EUT is powered by 4.5V AA batteries. After switch on the EUT and paired with RC Drone, the EUT can be controlled to fly forward, backward, turn left/right.

Antenna Type: Internal antenna

Antenna Gain: 0Bi

Nominal rated field strength: 93.2dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 5dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 96.2dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.251\text{mw}$

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;

Conducted Power = 1.251mW.

The SAR Exclusion Threshold Level:

$= 3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$
 $= 3.0 \cdot 5 / \sqrt{2.475} \text{ mW}$
 $= 9.53 \text{ mW}$

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.