

INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Control unit for Drone DX 5inch Stunt model: JG2016A operating at 2.4GHz band. It is powered by DC 9.0V (6 x 1.5V AA batteries). For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The normal radiated output power (e.i.r.p) is: -5.0dBm (tolerance: +/- 3dB).

The normal conducted output power is: -5.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 90.8dB μ V/m at 3m in the frequency 2404MHz

The EIRP = [(FS*D) ^2 / 30] mW = -4.43dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 87.8dB μ V/m at 3m in the frequency 2440MHz

The EIRP = [(FS*D) ^2 / 30] mW = -7.43dBm
which is within the production variation.

The maximum conducted output power specified is -2.0dBm = 0.6mW

The source- based time-averaging conducted output power
= 0.6* Duty Cycle mW < 0.6mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt (2.476) mW

= 9.53mW

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.

The duration of one cycle = 7.5362ms

Effective period of the cycle = 0.4638ms x 2=0.9276ms

DC = 0.9276ms / 7.5362ms = 0.1231 or 12.31%