INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Control unit for DRONE MACH 10INCH WITH CAMERA model: MVid 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: -10.0dBm (tolerance: +/- 3dB). The normal conducted output power is: -10.0dBm (tolerance: +/- 3dB). Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is $84.4dB\mu V/m$ at 3m in the frequency 2407MHz The EIRP = [(FS*D) ^2 / 30] mW = -10.83dBm which is within the production variation.

The Minimum peak radiated emission for the EUT is $83.9dB\mu V/m$ at 3m in the frequency 2442MHz The EIRP = [(FS*D) ^2 / 30] mW = -11.33dBm which is within the production variation.

The maximum conducted output power specified is -7.0dBm = 0.2mW The source- based time-averaging conducted output power = 0.2* Duty Cycle mW < 0.2mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level: = 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz) = 3.0 * 5 / sqrt (2.477) 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 = 12.6812msEffective period of the cycle = 1.5942msDC = 1.5942ms / 12.6812ms = 0.1257 or 12.57%