

Analysis Report

Report No.: 19011248HKG-001

The EUT is powered by 1 x 3.7V rechargeable battery. After switching on the EUT and being paired with the smart phone via Bluetooth (Bluetooth V4.0, BLE only), the user can press a sequence of commands via the smart phone app. Each command is either one forward/backward movement, left/ right turn, or a pause. When the “Go” button is pressed, the unit will execute all the commands stored in order with a short pause between each command.

Antenna Type: Internal, Integral

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Antenna Gain: 0dBi

Nominal rated field strength: 93.10dBμV/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 96.10dBμV/m at 3m.

Thus, it below calculated field strength according to minimum SAR exclusion threshold level as follows:

The worst case of SAR Exclusion Threshold Level:

$= 3.0 * (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

$= 3.0 * 5 / \sqrt{2.483.5} \text{ mW}$

$= 9.52 \text{ mW}$

According to the KDB 412172 D01:

$\text{EIRP} = [(\text{FS} * \text{D})^2 * 1000 / 30]$

Calculated Field Strength for 9.52mW is 105dBuV/m at 3m

Since maximum field strength plus production tolerance $\leq 105\text{dBuV/m}$ at 3m and antenna gain is $\geq 0.0\text{dBi}$, it is concluded that maximum Conducted Power and Field Strength are well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.