

Product Name: 2.4GHz Wireless Receiver

Model Number: RG201

FCCID: OO9RG201

RADIO FREQUENCY EXPOSURE COMPLIANCE RESULT :

PASS Test standard : According to 447498 D01 General RF Exposure Guidance v05

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where } f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz}$

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

$$\text{eirp} = \text{pt} \times \text{gt} = (E \times d)^2 / 30$$

where:

pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, --- $10^{(\text{dBuV/m})/20} / 10^6$

d = measurement distance in meters (m)---3m

So $\text{pt} = (E \times d)^2 / 30 \times \text{gt}$

Field strength =86.73dBuV/m @3m

Ant gain =0dBi

So $\text{pt} = \{ [10^{(86.73/20)} / 10^6] \times 3 \}^2 / 30 \times 1 \times 1000 \text{ mW} = 0.1413 \text{ mW}$

So $(0.1413 \text{ mW} / 5\text{mm}) \times \sqrt{2.439} = 0.044 < 3$

Then SAR evaluation is not required