



## MPE calculation

**Model number: GRG2501**  
**FCC ID RX2GRG2501**  
**IC: 4983A-GRG2501**

According to the RSS-102, issue 5 Standard and to FCC §15.247(b)(4) and §1.1307(b)(1), systems operation under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

### MPE Prediction

<i>Frequency range (MHz)</i>	<i>Power density (mW/cm<sup>2</sup>)</i>
400 - 1500	f/1500
1500 - 100000	1 mW/cm <sup>2</sup>

Equation for calculation

$$S = P * G / (4\pi R^2)$$

Where: S – Power density  
P – Power input to antenna  
G – Antenna gain relative to isotropic radiator  
R – Distance to antenna

Maximum peak output power at antenna terminal: +13.8 dBm (23.99 mW)

Antenna gain: -2 dBi

Prediction distance: 20cm

MPE limit for General Population/Uncontrolled Exposure: 1 mW/cm<sup>2</sup>

### Calculation's results:

Power density at 20cm distance: **0.003 mW/cm<sup>2</sup>**

Best Regards