

Phoenix Testlab TCB
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MPE calculation GNOV1B

Dear Sirs,

The maximum measured power output is 2 W 32,71 dBm for GSM850 and 29,79 dBm for GSM1900. For end products it always has to be ensured that the minimum distance to the human body is 20 cm. The module therefore is specified as a mobile transmitter.

The lowest limit for 850 MHz mobile operations where no routine evaluation is required is 1,5 W ERP in accordance to FCC § 2.1091.

The calculated maximum antenna gain is as follows:

$$S = P \cdot G / 4\pi R^2, G = 10 \log 1500 \text{ mW} - 32,71 \text{ dBm} = -0,95 \text{ dBd}$$

The lowest limit for 1900 MHz mobile operations where no routine evaluation is required is 2 W EIRP in accordance to FCC § 24.232.

The calculated maximum antenna gain is as follows:

$$S = P \cdot G / 4\pi R^2, G = 10 \log 2000 \text{ mW} - 29,79 \text{ dBm} = 3,2 \text{ dBi}$$

The maximum gain of the antenna path (cable loss + antenna gain) shall not exceed the above mentioned values.

Please contact us if you have any additional questions.

Best Regards