

## **Calculation: RF-Exposure**

Type identification: TN902-Q120L130-H1147

In accordance to the CFR Part 47, §1.1310

- S: Limit for power density according to CFR Part 47, §1.1310:
  6 W/m<sup>2</sup>
- P: 0.661 W
- G: 3.15 dBi = 2.07
- D: Duty cycle: 100 % = 1
- R: Distance in what the limit of S has to be reached: 0.2 m

$$S = \frac{P \cdot G \cdot D}{4 \cdot \pi \cdot R^2} \quad \Rightarrow \quad \underline{S} = \frac{0.661 \ W \cdot 2.07 \cdot 1}{4 \cdot \pi \cdot (0.2 \ m)^2} \quad = \quad 2.72 \frac{W}{m^2}$$

The value for the "General population / Uncontrolled Exposure" of the power density is below the limit of CFR Part 47, §1.1310.