

$$S(\text{dBm}) = 10 \times \log \left( \frac{S \left( \frac{\text{mW}}{\text{cm}^2} \right)}{\frac{1\text{mW}}{\text{cm}^2}} \right)$$

$$S \left( \frac{\text{mW}}{\text{cm}^2} \right) = 1\text{mW}/\text{cm}^2 \times 10^{\frac{S(\text{dBm})}{10}}$$

S(dBm) - signal measured in logarithmic scale (dBm)

S(mW/cm<sup>2</sup>) Signal strength measured in mW/cm<sup>2</sup> (miliWatt on centimeter square) real scale.

Signal Strength different units		
0dBm	0,0010000000000000 W/cm <sup>2</sup>	1mW/cm <sup>2</sup>
-10 dBm	0,0001000000000000 W/cm <sup>2</sup>	100μ W/cm <sup>2</sup>
-20 dBm	0,0000100000000000 W/cm <sup>2</sup>	10μ W/cm <sup>2</sup>
-30 dBm	0,0000010000000000 W/cm <sup>2</sup>	1μ W/cm <sup>2</sup>
-40 dBm	0,0000001000000000 W/cm <sup>2</sup>	100n W/cm <sup>2</sup>
-50 dBm	0,0000000100000000 W/cm <sup>2</sup>	10n W/cm <sup>2</sup>
-60 dBm	0,0000000010000000 W/cm <sup>2</sup>	1n W/cm <sup>2</sup>
-70 dBm	0,0000000001000000 W/cm <sup>2</sup>	100p W/cm <sup>2</sup>
-80 dBm	0,0000000000100000 W/cm <sup>2</sup>	10p W/cm <sup>2</sup>
-90 dBm	0,0000000000010000 W/cm <sup>2</sup>	1p W/cm <sup>2</sup>
-100 dBm	0,0000000000001000 W/cm <sup>2</sup>	100f W/cm <sup>2</sup>