

MPE Calculations

The following MPE calculations are based on the Linx ANT-916-CW-QW quarter wave antenna with a max gain of 1.8dBi. The MOD164's maximum output power is 21dBm.

Equation from page 18 of OET Bulletin 65, Edition 97-01:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Power Input To The Antenna

G = Antenna Gain

R = Distance To The Center Of The Antenna

Maximum Radio Output To Antenna (P)	20dBm
Maximum Radio Output To Antenna (P)	100.0mW
Maximum Antenna Gain (G)	1.8dBi
Maximum Antenna Gain (G)	1.5135 (numeric)
Distance To Antenna (R)	20cm
Predicted Frequency	900MHz
MPE limit for uncontrolled exposure at predicted frequency	0.6mw/cm ²
Power density at predicted frequency (calculated)	0.030111mw/cm ²
Margin of Compliance	12.994dB
Max Antenna Gain	15.546dBi

Regards,



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President