

5 Aug 2020

ERP Calculation for corrected ERP:

-Effective Radiated Power

ERP (in dBm) = TPO + System Gain

TPO = Transmit Power Output = -70 dBm

G = Antenna Gain = 2.15 dB

ERP = -70 dBm + 2.15 dBi

ERP = -72.15 dBm

ERP Watt Conversion

$W = 1W \times 10^{(dBm/10)} / 1000$

$W = 1W \times 10^{(-72.15/10)} / 1000$

$W = 1W \times (6.09537e-8) / 1000$

$W = 6.09537e-11$

$W \approx 61 \text{ pW}$