## Prediction of MPE limit at a given distance

<u>GS075</u>

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

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

where:  $\overline{S}$  = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at device output terminal:	12.39	(dBm)
Cable and Jumper loss	0.0	(dB)
Maximum peak output power at antenna input terminal:	12.39	(dBm)
Maximum peak output power at antenna input terminal:	17.33803998	(mW)
Single Antenna gain(typical):	0.5	(dBi)
Number of Antennae	1	
Total Antenna gain(typical):	0.5	(dBi)
Maximum antenna gain:	1.122018454	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	903	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.602	(mW/cm^2)
Power density at prediction frequency:	0.003870	(mW/cm^2)
	0.038702	(W/m^2)
Maximum allowable antenna gain:	22.41866347	(dBi)
Margin of Compliance:	21.91866347	dB