



Prediction of MPE limit at a given distance

[DEKO 3189 Down-link](#)

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 = 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 antenna input terminal: 31.30 (dBm)

Maximum peak output power at antenna input terminal: 1348.962883 (mW)

Antenna gain(typical): 0 (dBi)

Maximum antenna gain: 1 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 860 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.573333333 (mW/cm²)

Power density at prediction frequency: 0.268368 (mW/cm²)

2.683676 (W/m²)

Maximum allowable antenna gain: 3.296770475 (dBi)

Margin of Compliance: 3.296770475 dB



Prediction of MPE limit at a given distance

[DEKO 3189 Up-link](#)

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 = 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 antenna input terminal:	<u>22.15</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>164.0589773</u>	(mW)
Antenna gain(typical):	<u>0</u>	(dBi)
Maximum antenna gain:	<u>1</u>	(numeric)
Prediction distance:	<u>20</u>	(cm)
Prediction frequency:	<u>898.5</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>0.599</u>	(mW/cm^2)
Power density at prediction frequency:	<u>0.032638</u>	(mW/cm^2)
	<u>0.326385</u>	(W/m^2)
Maximum allowable antenna gain:	<u>12.63696678</u>	(dBi)
Margin of Compliance:	<u>12.63696678</u>	dB