## Prediction of MPE limit at a given distance

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
Valid for frequencies from 100 to 300.000 MHz

| | | |
|---|---|---|
| Maximum peak output power at antenna input terminal: | **19.30** | (dBm) |
| Maximum peak output power at antenna input terminal: | **0.085** | (W) |
| Antenna gain(typical): | **1.80** | (dBi) |
| Maximum antenna gain: | **1.514** | (numeric) |
| Prediction distance: | **20** | (cm) |
| Prediction frequency: | **1925** | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | **10.00** | (W/m^2) |

| | | |
|---|---|---|
| Power density at prediction frequency: | **0.2563** | (W/m^2) |
| Maximum allowable antenna gain: | **17.7** | (dBi) |
| Margin of Compliance: | **15.9** | (dB) |