



### 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 30 to 100.000 MHz

|                                                              |                    |           |
|--------------------------------------------------------------|--------------------|-----------|
| Maximum peak output power at antenna input terminal:         | <u>19,70</u>       | (dBm)     |
| Maximum peak output power at antenna input terminal:         | <u>93,32543008</u> | (mW)      |
| Antenna gain(typical):                                       | <u>3,00</u>        | (dBi)     |
| Maximum antenna gain:                                        | <u>1,995262315</u> | (numeric) |
| Prediction distance:                                         | <u>20</u>          | (cm)      |
| Prediction frequency:                                        | <u>1925</u>        | (MHz)     |
| MPE limit for uncontrolled exposure at prediction frequency: | <u>1,00</u>        | (mW/cm^2) |
| Power density at prediction frequency:                       | 0,037045           | (mW/cm^2) |
| Maximum allowable antenna gain:                              | 17,31              | (dBi)     |
| Margin of Compliance:                                        | 14,31              | (dB)      |