

13.4 Dome antenna module.

The following MPE calculations are based on the Dome antenna, with a measured ERP of 120.5dBμV/m, at 3 meters and conducted RF power of +19.6 dBm as presented to the antenna. The calculated gain of this antenna, based on the ERP measurements is 5.7 dB.

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		
Maximum peak output power at antenna input terminal:	19.60	(dBm)	
Maximum peak output power at antenna input terminal:	91.201	(mW)	
Antenna gain(typical):	5.7	(dBi)	
Maximum antenna gain:	3.715	(numeric)	
Prediction distance:	20	(cm)	
Prediction frequency:	900	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	0.6	(mW/cm ²)	
Power density at prediction frequency:	0.067411	(mW/cm ²)	
Maximum allowable antenna gain:	15.2	(dBi)	
Margin of Compliance at	20	cm =	9.5 dB