

MPE Calculations	
Company Name	Honeywell International Inc
Model #	W8735ER
FCC ID #	HS9-W8735ER01
IC #	573R-W8735ER01

The following MPE calculations are based on measured field strength of 111.36 dB μ V/m at 3m and conducted RF power of +10.5 dBm as presented to the antenna. The calculated gain of this antenna, based on the field strength measurements (over a conducting ground plane) is 5.7 dBi. The output power is less than 200mW and exempt from evaluation as stated in Industry Canada RSS-102 section 2.5.1.

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: 10.50 (dBm)

Maximum peak output power at antenna input terminal: 11.220 (mW)

Antenna gain(typical): 5.7 (dBi)

Maximum antenna gain: 3.715 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 903 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.6 (mW/cm²)

Power density at prediction frequency: 0.008293 (mW/cm²)

Maximum allowable antenna gain: 24.3 (dBi)

Margin of Compliance at 20 cm = 18.6 dB