



5473A Clouds Rest Road : Mariposa, CA 95338 : Phone 209-966-5420 : Fax 209-742-6133

## Maximum Permissible Exposure Calculations

Date of Report: October 17, 2001

Calculations prepared for:

*IP Mobile Net*

11909 East Telegraph Road  
Santa Fe Springs, CA 90670

Calculations prepared by:

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CKC Laboratories, Inc.  
5473A Clouds Rest Road  
Mariposa, CA 95338

Model Number: IP1

FCC Identification: MI7-IPMNIP1

Fundamental Operating Frequency:

150MHz - 156MHz

Maximum Rated Output Power:

60.00 Watts

Measured Output Power:

60.25 Watts

Power Output and Operating Frequency Information used for these calculations were from:  
CKC Laboratories, Test Report # FC01-064A

MPE Limit in accordance with 1.1310(b): Limits for general population/uncontrolled exposure

$$\text{MPE Limit} = 0.2\text{mW/cm}^2 \text{ or } 27.5\text{V/M}$$

Power Output (Watts)	Distance (Meters)	V/M	Power Density (mW/cm <sup>2</sup> )	Result
<b>60.25</b>	<b>2.0</b>	<b>21.258</b>	<b>0.1198</b>	<b>PASS</b>
<b>60.25</b>	<b>1.6</b>	<b>26.573</b>	<b>0.1873</b>	<b>PASS</b>

$$\text{Power Density (W/M}^2\text{)} = (30 * P_t * G) / (d^2 * Z_o)$$

$P_t$  = Power Delivered to the Antenna

$G$  = Antenna Gain

$d$  = Distance in meters

$Z_o$  = Impedance of Free Space

Under normal operating conditions, the antenna is designed to maintain a separation distance of 2 meters from all persons. As can be seen from the MPE results, this device passes the limits specified in 1.1310 at a distance of 1.6 Meters and at the measured output power of 60.25 Watts.