

## Question #2: MPE Requirement

The M/A Com ISM Radio and all six antenna options is fully compliant with the MPE requirements for the general public. The ISM Radio has an external antenna that is mounted on top of a antenna tower occupational users and the general public will find is difficult to get within three meters of the antenna. The field density from the antenna at three meters can be calculated as follows:

For worst case antenna with a gain of 24dBi

$$S = EIRP / 4\pi r^2$$

$$S = \text{mW/cm}^2$$

EIPP = mV/m measured at three meters

r = distance from source

$$S = 42 / 113 = 0.37 \text{ mW/cm}^2$$

The ISM Radio is fully compliant with the MPE requirement for the general public of 1mW/cm<sup>2</sup>.

## Question 2: User Manual Info

### General Safety Information

The Federal Communications Commission (FCC), with its action in the General docket, 79-144, March 13, 1985, has adopted a safety standard for the human exposure to radio frequency electromagnetic energy emitted by FCC regulated equipment. Proper operation of this radio as summarized below will result in user exposure substantially below the FCC recommended limits,

- Do not operate this radio when someone is within the proximity of the antenna. The following minimum distances should be observed:
  1. Three meters for 0dbi antennas.
  2. Three meters for gain antennas to 6dbi or when the antenna type is not known.
- Do not operate this radio if any of the RF connectors are not secure or if open connections are not properly terminated.

The following general safety guidelines should also be followed:

- Do not operate this radio near electrical blasting caps or in an explosive atmosphere.
- The equipment must be properly grounded according to the installation instructions.
- Only a qualified technician must service the equipment.