



IMPORTANT

If an outdoor antenna is connected, make sure the system is always grounded to allow for protection against voltage surge and built-up static charges. Outdoor antennas should always be located away from power lines.

DAMAGE REQUIRING SERVICE

This product should be serviced by qualified service personnel when:

- Objects have fallen, or liquid has been spilled into the product; or
- The product has been exposed to rain or moisture; or
- The product does not appear to operate normally or exhibits a marked change of performance; or
- The product has been dropped, or the cabinet damaged.

RF EXPOSURE



ATTENTION!

To satisfy FCC/IC RF exposure requirements, a separation distance 25.4cm (10.0") or more should be maintained between the antenna of this device and persons. To ensure compliance, operations at closer than this distance is not allowed.

RADIO OPERATOR



Futurecom requires the OCR operator to ensure FCC Requirements for Radio Frequency Exposure are met. The OCR output power has to be set such that the maximum Effective Radiated Power (ERP) does not exceed 5W at the antenna. The minimum distance between all possible personnel and the antenna at 5W ERP must be at least 25.4cm (10.0").

FAILURE TO OBSERVE THE MPE DISTANCE EXCLUSION AREA AROUND THE ANTENNA MAY EXPOSE PERSONS WITHIN THIS AREA TO RF ENERGY ABOVE THE FCC EXPOSURE LIMIT FOR BYSTANDERS (GENERAL POPULATION). IT IS THE RESPONSIBILITY OF THE OCR OPERATOR TO ENSURE THAT MPE LIMITS ARE OBSERVED AT ALL TIMES DURING REPEATER TRANSMISSIONS. THE OCR OPERATOR MUST ENSURE AT ALL TIMES THAT NO PERSON COMES WITHIN MPE DISTANCE FROM THE ANTENNA.

ATTENTION!



To satisfy FCC/IC RF exposure requirements, the OCR site operator must comply with FCC/IC requirements for maximum site EIRP radiated power and antenna height limits.

Use the following MPE Safe Distance calculation for other than 5W ERP antenna power:

Calculation Method for RF Safety Distance r:

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

- Where:
- P: power input to the **antenna** in mW.
 - EIRP: Equivalent (effective) isotropic radiated power in mW.
 - S: power density mW/cm².
 - G: numeric gain of antenna relative to isotropic radiator.
 - r: distance to centre of radiation in cm.

RF EXPOSURE DISTANCE LIMIT: $r = (PG/4\pi S)^{1/2} = (EIRP/4\pi S)^{1/2}$

For General Population/ Uncontrolled Exposure:

$S = 0.2 \text{ mW/cm}^2$ for frequency range of 30MHz – 300MHz.

$S = f/1500$ in mW/cm² for frequency range of 300MHz – 1500MHz. f is the minimum used frequency in MHz.

As an example, let us consider a case of minimum frequency $f = 931.0125\text{MHz}$, ERP RF power $P = 5.0\text{W}$:

$ERP = 5000 \text{ mW} = 10 \log(5000) \text{ dBm} = 37.0 \text{ dBm}$

$S = 931.0125/1500 \text{ mW/cm}^2$

For General Population/bystanders: $r = (ERP/4\pi S)^{1/2} = (5000/4\pi(931.0125/1500))^{1/2} = 25.32\text{cm}$.

The MPE safe distance is therefore at least 25.4cm (10.0”).



ATTENTION!

The MOBEXCOM OCR must be restricted to occupational use only to satisfy FCC RF Exposure requirements.