

FCC Part 15.247 Certification **Test Report**

FCC ID: R7PIWRS3

FCC Rule Part: 15.247

ACS Report Number: 04-0264-15C

Manufacturer: Cellnet Technology, Inc.
Equipment Type: Utility Meter Usage Data Transceiver
Model: IWR with Utilinet DC Radio

RF Exposure Information

General Information:

Applicant: Cellnet
 ACS Project: 04-0264
 FCC ID: R7PIWRS3
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Whip
 Antenna Gain: 5dBi
 Transmitter Conducted Power: 29.75dBm
 Maximum System EIRP: 34.75dBm
 Operating Configuration: Fixed mounted
 Exposure Conditions: Greater than 20 centimeters

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 P_x G}}{d} \quad \text{Power Density: } P_d (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure				
Transmit Freq. (MHz)	Radio Power (dBm)	Radio Power (W)	Antenna Gain (dBi)	MPE Distance (cm)
903	29.75	0.94406	5	19.8651

Installation Guidelines

The installation manual contains the following text advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

"RF Exposure (Intentional Radiators Only)"

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of 20cm is maintained from the general population."

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.