

## **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:

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

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.