

## **FCC Part 15.247 Certification** **Test Report**

**FCC ID: SK9C1A-3**

**FCC Rule Part: 15.247**

**ACS Report Number: 05-0122-15C**

Manufacturer: Itron Electricity Metering, Inc.  
Equipment Type: Electricity Meter With FHSS Transmitter  
Trade Name: CENTRON<sup>TM</sup> ICARe  
Model: C1A-3

## **RF Exposure Information**

**General Information:**

Applicant: Itron Electricity Metering, Inc.  
 ACS Project: 05-0122  
 FCC ID: SK9C1A-3  
 Device Category: Fixed Mount  
 Environment: General Population/Uncontrolled Exposure

**Technical Information:**

Antenna Type: Patch  
 Antenna Gain: 0dBi  
 Transmitter Conducted Power: 21.67 dBm  
 Maximum System EIRP: 21.67dBm  
 Operating Configuration: Mounted on side of residential or commercial structure  
 Exposure Conditions: Greater than 20 centimeters

**MPE Calculation**

The Power Density (mW/cm<sup>2</sup>) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm2)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Freq. (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
909.5861	21.67	0.61	146.893	0	1.00	20.00	0.0292

**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)"**

This equipment complies with the FCC RF radiation requirements for uncontrolled environments. To maintain compliance with these requirements, the antenna and any radiating elements should be installed to ensure that a minimum separation distance of 20 cm 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.