

## **Transmitter Certification**

### **Test Report**

**FCC ID: SDBCPRLM01**

**FCC Rule Part: CFR 47 Part 24 Subpart D, Part 90 Subpart I, Part 101  
Subpart C**

**ACS Report Number: 07-0126-LD**

**Applicant: Sensus Metering Systems  
Model(s): GCVTF**

## **RF Exposure**

**General Information:**

Applicant: SENSUS METERING SYSTEMS  
 ACS Project: 07-0126  
 FCC ID: SDBCPRLM01  
 Device Category: Fixed  
 Environment: Uncontrolled/General Population

**Technical Information:**

Antenna Type: Integral 1/2 Wave Dipole  
 Antenna Gain: 0.44dBi  
 Max Transmitter Output Power: 30.56 dBm  
 Max System EIRP: 30.56 dBm  
 Operating Configuration: Fixed Mounted  
 Exposure Conditions: Greater than 20cm

**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)

Calculations were performed at low, middle, and high channels within the total band of operation.

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure							
Transmit Frequency (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)
896.0125	30.58	0.60	1142.88	0.44	1.107	20	0.252
928.925	30.39	0.62	1093.96	0.44	1.107	20	0.241
959.925	29.9	0.64	977.24	0.44	1.107	20	0.215

**Installation Guidelines**

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

**Conclusion**

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