



Excellence in Compliance Testing

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## **Certification Exhibit**

**FCC ID: SDBFLEXLG100  
IC: 2220A-FLEXLG100**

**FCC Rule Part: CFR 47 Part 24 Subpart D, Part 90 Subpart I, Part 101  
Subpart C  
IC Radio Standards Specification: RSS 119, RSS 134**

**ACS Report Number: 08-0432-LD**

**Applicant: Sensus Metering Systems  
Model: FLEXLG100**

## **RF Exposure**

**General Information:**

Applicant: Sensus Metering Systems, Inc.  
 ACS Project: 08-0432-LD  
 FCC ID: SDBFLEXLG100  
 Device Category: Mobile  
 Environment: Uncontrolled/General Population

**Technical Information:**

Antenna Type: PCB Printed Monopole  
 Antenna Gain: 0dBi  
 Maximum Transmitter Conducted Power: 29.52dBm  
 Maximum System EIRP: 29.52dBm, 0.895 W

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/cm<sup>2</sup>)
- 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 Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm <sup>2</sup> )	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )
896.0625	29.52	0.60	895.36	0	1.000	20	0.178
928.925	29.19	0.62	829.85	0	1.000	20	0.165
959.925	28.94	0.64	783.43	0	1.000	20	0.156

**Installation Guidelines**

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

**RF Exposure**

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 centimeters will be maintained.

**Conclusion**

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