



America

Certification Exhibit

FCC ID: SDBSONIXIQ

FCC Rule Part: 47 CFR Part 2.1091

TÜV SÜD Report Number: RD72140964.200

Manufacturer: Sensus Metering Systems, Inc
Model: SONIXIQ

RF Exposure

General Information:

Applicant: Sensus Metering Systems, Inc
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Dipole
 Antenna Gain: 3.0 dBi
 Maximum Transmitter Conducted Power: 30.53 dBm, 1129.8 mW
 Maximum System EIRP: 33.53 dBm, 2254.24 mW
 Exposure Conditions: 20 centimeters or greater

MPE Calculation

The Power Density (mW/cm²) 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)

Table 1: MPE Calculation

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)
901.5	30.53	0.60	1129.80	3	1.995	20	0.448