Transmitter Certification

FCC ID: SDBIDTB001

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

ACS Report Number: 06-0011-LD

Manufacturer: Advanced Metering Data Systems, LLC
Equipment Type: Electricity Meter Transmitter
Trade Name: Sensus Integrated Display Transceiver
Model: IDTB001

RF Exposure

General Information:

Applicant: ADVANCED METERING DATA SYSTEMS, LLC
ACS Project: 06-0011
FCC ID: SDBIDTB001
Device Category: Mobile
Environment: Uncontrolled/General Population

Technical Information:

Antenna Type: PCB
Antenna Gain: 0dBi
Max Transmitter Output Power: 30.6 dBm
Max System EIRP: 30.6 dBm
Operating Configuration: Fixed Mounted to a Wall
Exposure Conditions: Greater than 20cm

MPE Calculation

The Power Density (mW/cm^2) 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 and high channels within the 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	30.5	0.60	1122.02	0	1.000	20	0.223
959.93125	30.4	0.64	1096.48	0	1.000	20	0.218

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."

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