

Transmitter Certification **Test Report**

FCC ID: SDBTGB001LP

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

ACS Report Number: 05-0169-LP

Manufacturer: Advanced Metering Data Systems, LLC
Equipment Type: Base Station Transceiver
Model(s): TGB001LP

RF Exposure

General Information:

Applicant: ADVANCED METERING DATA SYSTEMS, LLC
 ACS Project: 05-0169
 FCC ID: SDBTGB001LP
 Device Category: Fixed
 Environment: Uncontrolled/General Population

Technical Information:

Antenna Type: Omnidirectional
 Antenna Gain: 11.14 dBi
 Max Transmitter Output Power: 30.94 dBm, 1.24 W
 Max System EIRP: 42.08 dBm, 16.14 W
 Operating Configuration: Fixed Mounted
 Exposure Conditions: Greater than 0.5m

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)

Calculations were performed at multiple channels within the band of operation.

Transmit Freq. (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm ²)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)
930.00625	30.76	0.62	1191.24	11.14	13.002	50	0.493
940.99375	30.76	0.63	1191.24	11.14	13.002	50	0.493
935.00625	30.94	0.62	1241.65	11.14	13.002	50	0.514
939.99375	30.86	0.63	1218.99	11.14	13.002	50	0.504
941.00625	30.76	0.63	1191.24	11.14	13.002	50	0.493
959.99375	30.2	0.64	1047.13	11.14	13.002	50	0.433

Installation Guidelines

The installation manual contains the appropriate 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.