

Narrowband PCS Transmitter

Certification Test Report

**Model: AMDS-1000TR
FCC ID: SDBAMDS1000TR**

ACS Report Number: 04-0166-24D

RF Exposure

General Information:

Applicant: AMDS LLC
 ACS Project: 04-0166
 FCC ID: SDBAMDS1000TR
 Device Category: Mobile
 Environment: Uncontrolled/General Population

Technical Information:

Antenna Type: PCB
 Antenna Gain: 0dBi
 Transmitter Conducted Power: 30.4
 Maximum System EIRP: 30.4
 Operating Configuration: Fixed Mounted to a Wall
 Exposure Conditions: Greater than 20cm

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } P_d = (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Freq. (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm ²)	Radio Power (W)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	E (V/m)	MPE Distance (cm)
940.1125	30.5	0.63	1.12202	0	1.00	48.73	11.9047
901.1125	30.5	0.60	1.12202	0	1.00	47.56	12.1987
932.23125	30.5	0.62	1.12202	0	1.00	48.35	12.0004
941.23125	30.5	0.63	1.12202	0	1.00	48.73	11.9047

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) is maintained between the radiating element and the user and/or general population.”

Conclusion

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