

## **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:

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

### **MPE Distance**

| MPE Calculator for Mobile Equipment<br>Limits for General Population/Uncontrolled Exposure* |                   |                              |                 |                    |                       |         |                   |
|---------------------------------------------------------------------------------------------|-------------------|------------------------------|-----------------|--------------------|-----------------------|---------|-------------------|
| Transmit Freq. (MHz)                                                                        | Radio Power (dBm) | Power Density Limit (mW/Cm2) | 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.