

## **Type Acceptance Test Report**

### **Wideband FM Audio/Video Transmit Module**

**FCC ID: QN41500**

**FCC Rule Part: 90**

**ACS Report Number: 03-0091-90TA**

Manufacturer: Datawave  
Model: Datawave1500

### **RF Exposure Information**

**General Information:**

Applicant: Datawave Technologies  
 ACS Project: 03-0091  
 FCC ID: Q4N1500  
 Device Category: Fixed Mount  
 Environment: General Population/Uncontrolled Exposure

**Technical Information:**

Antenna Type: Integrated folded dipole and External Patch  
 Antenna Gain: 0 dBi  
 Transmitter Conducted Power: 26.2dBm or 416.87mW  
 Maximum System EIRP: 26.2dBm or 416.87mW  
 Operating Configuration: Pole Mounted  
 Exposure Conditions: Greater than 20cm from the population

**MPE Calculation**

The minimum separation distance is calculated as follows:

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

**MPE Distance**

MPE Limits for General Population/Uncontrolled Exposure				
Radio Power (dBm)	Antenna Gain (dBi)	Sytem EIRP (mW)	MPE Limit (mW/cm <sup>2</sup> )	MPE Distance (cm)
26.2	10	4168.69	1.00	18.21

**Installation Guidelines**

The installation manual contains the following text advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

**Warning:**

All original equipment manufacturers (OEM) integrating this device within their products must maintain a minimum distance of 20cm between the installed antenna and the user or general population. For applications requiring handheld or body worn operations OEMS must submit their product to the FCC for Specific Absorption Rate (SAR) testing.

**Conclusion**

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