

# FCC RF Exposure Requirements

## 1. General information:

FCCID: QJEWMC63000902

Device category: Mobile per Part 2.1091

Environment: General Population/Uncontrolled Exposure

## 2. Antenna:

Antenna p/n	Type/Connector	Gain (dBi)
Miniature Magnetic Mount Maxrad – BMMG24000	Omni/MMCX	0.0
Dipole – Centurion WCP2400MMCX12	½ wave/MMCX	1.0

## 3. Operating configuration and exposure conditions:

Antenna: Dipole – Centurion WCP2400MMCX12

The antenna is located at more than 20cm from the body during normal operation.



## Installing the Antenna Assembly on a Laptop Computer

Complete the following procedure to mount the Antenna Assembly on a standard laptop computer.

1. Locate the Antenna and insert the connector into the WMC6300 antenna port as shown in Figure 9. **Note:** The connector will "snap" into place when fully inserted.

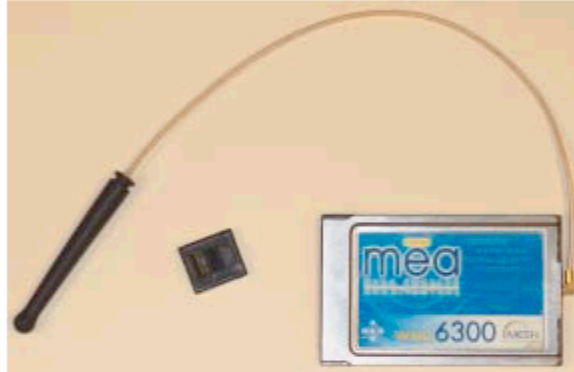


Figure 9. Attach Antenna to the WMC6300

2. Locate the Antenna Clip shown in Figure 10 and remove paper that protects the adhesive backing.



Figure 10. Antenna Clip

3. Attach the Antenna Clip to the back of the laptop computer display approximately 1 inch from the top corner of the display as shown in Figure 11. Ensure that the location selected for the Antenna Clip will reach the WMC6300 with the provided cable length.

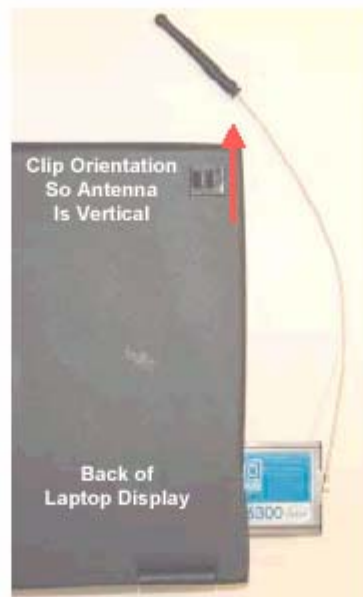


Figure 11. Mounting the Antenna Clip

4. Insert the Antenna into the Antenna Clip as shown in Figure 12.

Antenna: Vehicle operation - Miniature Magnetic Mount Maxrad – BMMG24000

The antenna is located at more than 20cm from any persons, including bystanders and passengers, during normal operation.

***Installing the Magnetic Antenna Assembly (Optional)***

Complete the following procedure to mount the Magnetic Mount Antenna with a 12-foot cable assembly to the rooftop of an automobile.

1. Locate the Magnetic Antenna and route the 12-foot cable as required from the location of the Host Computer to the rooftop of the automobile. Ensure that the Antenna will reach the Host Computer with the provided cable length.
2. The base of the antenna contains a powerful magnet that will adequately secure the antenna to the rooftop. Attach the base of the Magnetic Mount Antenna to the rooftop of the automobile so that the antenna is in a vertical orientation.

**Warning**

FCC regulations require that the antenna's operational position must be greater than 8 inches or 20 cm from the body of any people.

Never use the WMC6300 with the Antenna removed from the rooftop.

3. Insert the Antenna's Cable Connector into the WMC6300 antenna port as shown in Figure 13. **Note:** The connector will "snap" into place when fully inserted.

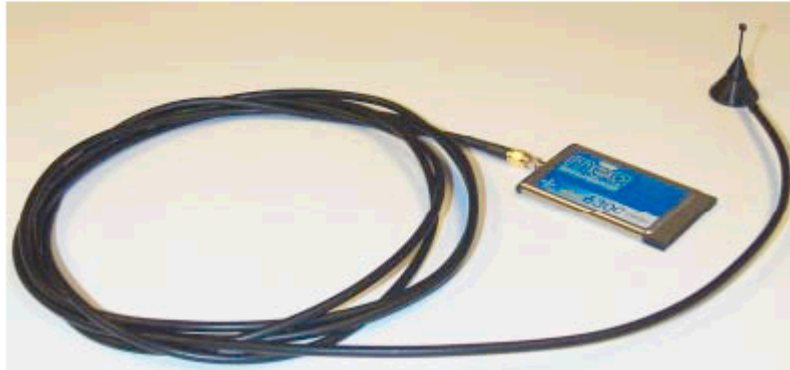


Figure 13. Attach Magnetic Mount Antenna to the WMC6300

**MPE Calculation:**

The minimum separation distance is calculated as follows:

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

The limit for general population/uncontrolled exposure environment above 1500MHz is 1mW/cm<sup>2</sup>

Channel Frequency: 2432 MHz

Power Density at 20 cm distance		Antenna Gain (dBi)	
		0	1
Power (mW)	Duty Cycle (%)*	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )
160	100	0.03	0.04
91.4	57.1	0.02	0.02

\*The maximum duty cycle that can be used with this device is presented in a separate exhibit.

**Conclusion:**

The device complies with the MPE requirements by providing a safe separation distance between the antenna, including any radiating structure, and any persons.