

# RF EXPOSURE INFO

## GSM operations at the 850 MHz Band

### **Used limit for 850MHz fixed operation**

A)  $0.57\text{mW/cm}^2$  @  $20\text{cm}=2.865\text{W}$  (34.57dBm) as per §1.1310 table 1B

B) 1000 W ERP for Cellular Radiotelephone Service as per §1.1307 Table 1

### **Max. permitted Antenna gain where no routine evaluation is required:**

Ant. Gain =  $34.57\text{dBm} - \text{measured cond. Power} = 34.57 - 32.59 = 1.98\text{dBi} - 2.14 = -0.16\text{dBd}$

### **Used limit for 850MHz mobile operation:**

C)  $0.57\text{mW/cm}^2$  @  $20\text{cm}=2.865\text{W}$  (34.57dBm) as per §1.1310 table 1B

D) 1.5 W (31.76dBm) ERP for frequencies below 1.5 GHz as per §2.1091(c)

### **Max. permitted Antenna gain where no routine evaluation is required:**

Ant. Gain =  $31.76\text{dBm} - \text{measured cond. Power} = 31.76 - 32.59 = -0.83\text{dBd}$

## GSM operations at the 1900 MHz Band

### **Limit for 1900MHz fixed operation:**

$1\text{mW/cm}^2$  @  $20\text{cm}=5\text{W}$  (37dBm)

Ant. Gain =  $37\text{dBm} - \text{measured cond. Power} = 37 - 29.82 = 7.18\text{dBi}$

### **Limit for 1900MHz mobile operation:**

2W (33dBm) EIRP

Ant. Gain =  $33\text{dBm} - \text{measured cond. Power} = 33 - 29.82 = 3.18\text{dBi}$

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