Product name: Wifi router
Manufacturer: SAGEMCOM
FCC Id: **VW3FAST5260**

## Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

**Transmitter n°1**

| | | |
|---|---|---|
| Maximum peak output power at the antenna terminal: | 28.90 | (dBm) |
| Maximum peak output power at the antenna terminal: | 776.2471166 | (mW) |
| Antenna gain(typical): | 6.4 | (dBi) |
| Maximum antenna gain: | 4.365158322 | (numeric) |
| Prediction distance: | 30 | (cm) |
| Prediction frequency: | 2400 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 1 | (mW/cm^2) |
| Power density at prediction frequency: | 0.299604 | (mW/cm^2) |

*Note : Transmitter n°1 includes the 3 antennas for 2.4GHz*
*Equivalent maximum gain for these 3 combinated antenna has been measured and found equal to 6.4dBi*
*28.9 dBm is the maximum power delivered to the 3 combinated antennas*

**Transmitter n°2**

| | | |
|---|---|---|
| Maximum peak output power at the antenna terminal: | 27.20 | (dBm) |
| Maximum peak output power at the antenna terminal: | 524.8074602 | (mW) |
| Antenna gain(typical): | 7 | (dBi) |
| Maximum antenna gain: | 5.011872336 | (numeric) |
| Prediction distance: | 30 | (cm) |
| Prediction frequency: | 5200 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 1 | (mW/cm^2) |
| Power density at prediction frequency: | 0.232567 | (mW/cm^2) |

*Note : Transmitter n°2 includes the 3 antennas for 5GHz*
*Equivalent maximum gain for these 3 combinated antenna has been measured and found equal to 7dBi*
*22.2 dBm is the maximum power delivered to the 3 combinated antennas*

**Transmitter n°1 + Transmitter n°2:**

[Pd(1)/LPd(1)] + [Pd(2)/LPd(2)] = 0.53217
<1