

## RF EXPOSURE

**FCC ID: 2ABD3-MS60I00000**

### Applicable Standard

According to §15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                                      |                                      |                                          |                                 |
|----------------------------------------------------------------|--------------------------------------|--------------------------------------|------------------------------------------|---------------------------------|
| <b>Frequency range (MHz)</b>                                   | <b>Electric field strength (V/m)</b> | <b>Magnetic field strength (A/m)</b> | <b>Power density (mW/cm<sup>2</sup>)</b> | <b>Averaging time (minutes)</b> |
| 0.3-1.34                                                       | 614                                  | 1.63                                 | *100                                     | 30                              |
| 1.34-30                                                        | 824/f                                | 2.19/f                               | *180/f <sup>2</sup>                      | 30                              |
| 30-300                                                         | 27.5                                 | 0.073                                | 0.2                                      | 30                              |
| 300-1,500                                                      |                                      |                                      | f/1500                                   | 30                              |
| 1,500-100,000                                                  |                                      |                                      | 1.0                                      | 30                              |

f = frequency in MHz; \* = Plane-wave equivalent power density;  
According to §1.1310 and §2.1091 RF exposure is calculated.

### Calculated Formulary:

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

### 5.1.2 Result:

| <b>Frequency (MHz)</b> | <b>Antenna Gain</b> |           | <b>Conducted Power</b> |        | <b>Evaluation Distance(cm)</b> | <b>Power Density (mW/cm<sup>2</sup>)</b> | <b>MPE Limit (mW/cm<sup>2</sup>)</b> |
|------------------------|---------------------|-----------|------------------------|--------|--------------------------------|------------------------------------------|--------------------------------------|
|                        | (dBi)               | (numeric) | (dBm)                  | (mW)   |                                |                                          |                                      |
| 2462                   | 3                   | 1.995     | 9.74                   | 9.4188 | 20                             | 0.003740                                 | 1                                    |

Note: To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

**Result: Compliance**