

**47 C.F.R. Part 1, Subpart I, Section 1.1310  
47 C.F.R. Part 2, Subpart J, Section 2.1091  
Maximum Permissible Exposure Calculations**

**FCC ID: SZV-PTM215U**

EUT Device Category = General Population/Uncontrolled Exposure

EUT consists of one ISM band radio transmitting operating at a frequency of:  
**902.875 MHz**

MPE Summary:

According subpart 1.1307 (b)(1) and 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Averaging Time (Minutes) |
|-----------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| 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                       |
| 300-1500              | /                             | /                             | f/1500                              | 30                       |
| 1500-100,000          | /                             | /                             | 1.0                                 | 30                       |

f = frequency in MHz; \* = Plane-wave equivalent power density

**Calculated Formulary:**

Predication of MPE limit at a given distance

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

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

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

PG = EIRP

MPE and Limit are calculated as follows:

| f (MHz) | Field Strength (dBuV/m) | EIRP (mW) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) | Δ        |
|---------|-------------------------|-----------|-------------------------------------|-----------------------------|----------|
| 902.875 | 74.6                    | 0.009     | 0.000002                            | 0.6                         | 0.599998 |

**Result:** The device meets FCC MPE limit at 20 cm for General Population/Uncontrolled Exposure as specified in 47 CRF §1.1310 and §2.1091.