**RF Exposure calculations**

EUT            : FHT100
FCC ID        : OV6FHT100
Antenna Gain   : 2.14 dBi

From ♣FCC 1.1310 table 1A, the maximum permissible RF exposure for an uncontrolled environment is f/1500, where f = frequency of transmission in MHz. The transmission frequency range is 920-924 MHz.  A stricter limit will be obtained by using the low end of the frequency range rather than the high end.  L (limit) = 920/1500 = 0.613 mW/cm^2.

Maximum conducted peak output power is 123.1 dBuV, or 16.1 dBm, and maximum antenna gain is 2.14 dBi from the half-wave dipole antenna. The maximum radiated output power resulted in P (power) = 66.7 mW EIRP.

To determine the minimum safe distance for uncontrolled exposure, the power is spread over the surface of a sphere of radius r.  The r value at which the radiated power is equal to the limit is the minimum safe distance.

L = P/(4*Pi*r^2)

r = (P/(4*Pi*L))^0.5

r = 3.0 cm

Notice in Installation Manual:
While installing and operating this transmitter, the radio frequency exposure limit may be exceeded at distances close to the transmitter.  Therefore, the user must maintain a minimum distance of 20 cm from the device at all times the device is in operation.

The table below identifies the distance where the 0.6mW/cm^2 exposure limits may be exceeded during continuous transmission using this device.

| Peak output power | | calculated RF Exposure Separation Distance(cm) | Minimum RF Exposure Separation Distance(cm) |
|---|---|---|---|
| dBm | mW | 3.0 | 20 |
| 16.1 | 66.7 | | |