

**Environmental evaluation and exposure limit  
according to FCC CFR 47 part 1, §1.1307, §1.1310; part 2, §2.1091**

The transceiver is classified as mobile.

Limit for power density for general population/uncontrolled exposure is  $f/1500$  mW/cm<sup>2</sup> for 300 – 1500 MHz frequency range

$$P = 763/1500 = \mathbf{0.509 \text{ mW/cm}^2}$$

$$P = 851/1500 = \mathbf{0.567 \text{ mW/cm}^2}$$

The transmitter maximum output power in low band is 37.8 mW, in high band – 38.4 mW, total 76.2 mW (18.8 dBm).

The maximum antenna gain is 10 dBi (7.85 dBd).

Maximum composite ERP is 18.8 dBm + 7.85 dBd = 26.65 dBm = 0.462 W (<1.5 W).

Maximum composite EIRP is 18.8 dBm + 10 dBi = 28.8 dBm = 759 mW.

The power density  $\mathbf{P \text{ (mW/cm}^2\text{)} = P_T / 4\pi r^2}$ , where

$P_T$  is the maximum equivalent isotropically radiated power (EIRP).

The power density  $P$  at 20 cm (minimum safe distance, required for mobile devices), calculated as follows:

$$\mathbf{P = 759 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.15 \text{ mW/cm}^2 < 0.509 \text{ mW/cm}^2}$$

General public cannot be exposed to dangerous RF level.