## **Operational Description**

The radio system is mainly composed of three parts: radio modem, frequency synthesizer and baseband microprocessor. The radio modem is a GFSK modem running at 1Mbps. The antenna is an embedded PCB antenna matching is done by using lumped inductors and capacitors.

The microcontroller scans keystrokes on the keyboard, then packs the data by adding preambles, frame information, and error checking bytes. The radio system uses one of 79 channels (the frequency range is 2.402-2.480GHz) to send signal in random.

The keyboard is powered by 3.7V Li-ion batteries. The Li-ion battery is charged by the PC via the USB port.

The USB port is for charging only.

Operation Frequency: 2402MHz~2480MHz

Channel numbers: 79
Channel separation: 1MHz
Modulation type: GFSK

Antenna Type: PCB Antenna

Antenna gain: -4.1dBi