## **Antenna Specification**

## **PIFA Antenna**

The antenna adopts the ultra-small PIFA antenna, and because of the limited area of PCB, the gain of antenna will be smaller than that of the other antennas. The communication distance can reach about  $15 \sim 20$  meters. The size of the Module PCB antenna is 10.5 \* 2.5mm, and the thickness of PCB is 1.6mm. The specific size of the antenna is shown in figure 1, the physical object is shown in figure 2.

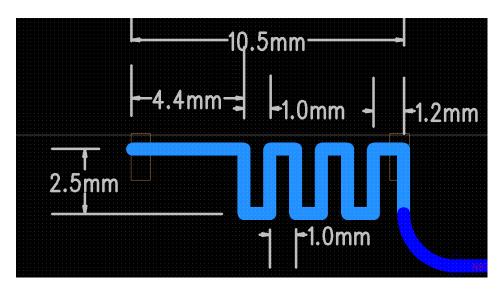


Figure 1 Antenna size

The antenna's S11 test data is shown in figure 3, covering the entire 2.4 G frequency band.

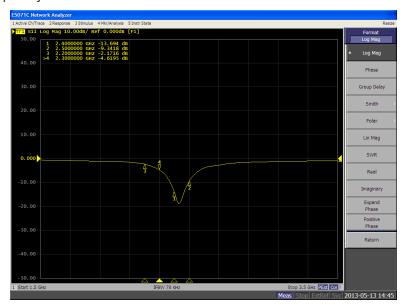


Figure 3 Antenna S11

The gain simulation data of the antenna is shown in figure 4, with the maximum gain of 0.9db.

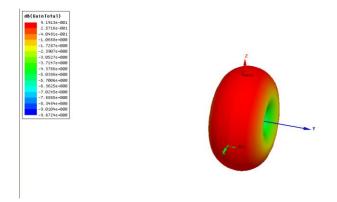


Figure 4 antenna gain and 3D direction diagram (the Y-axis is the left and right direction of figure 1, and the X-axis is the upper and lower direction of figure 1)