



2.4GHz Dipole FPC ANT Specification

联络人：夏建军 手机：13798358430

QQ: 1811757148 网址: www.lb-link.net 邮箱: xia@b-link.net.cn

深圳总部：深圳市光明区华强创意产业园 1A 栋 11 楼（邮编：518107）

深圳工厂：深圳市龙华区观澜街道观澜章阁科技园 C 栋

江西工厂：江西省赣州市定南县高新开发区必联工业园

SHENZHEN BILIAN ELECTRONIC CO., LTD

Add: 10~11/F, Building 1A, Huaqiang idea park, Guangming district, Shenzhen. Guangdong, China

Web: www.b-link.net.cn

Revision History

Revision	Summary	Release Date
1.0	First release	2023-07-30

Product Name: 2.4GHz Dipole FPC Ant

Frequency: 2.4~2.5GHz

Revision: V1.0

Customer Approval:

Company:

Title:

Signature:

Date:

BL-link Approval:

Title:

Signature:

Date:

1. Introduction



This antenna support 2.4GHz frequency. Designed by dipole antenna theory Almost Omni-directional radiation for far field.

Good port matching ,low return loss ,high efficiency can make communication more easily.

1.1 Features

- Operating Frequencies: 2400~2500MHz
- Radiation: Omni-directional radiation
- Modulation support: WLAN/BT/ZIGBEE
- Connect to host through IPEX connectors

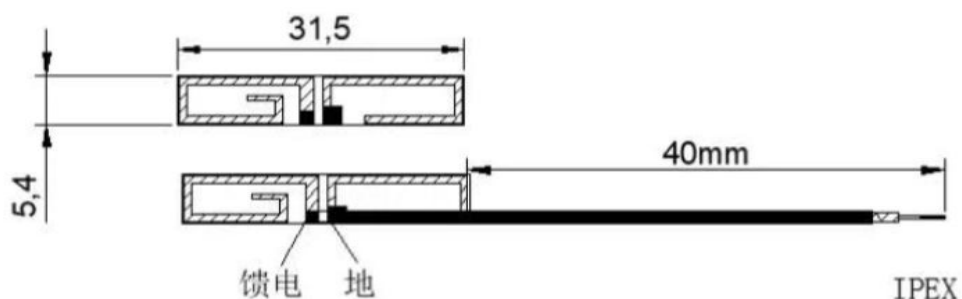
1.2 Applications

- IP Camera
- STB
- Smart TV
- Screen thrower
- Intelligent home furnishing
- Other devices which need to be supported by wireless network

1.3 General Specifications

Product Name	2.4GHz Dipole FPC antenna
Frequency	2400~2500MHz
Modulation support	WLAN/BT/ZIGBEE
VSWR	≤ 2
Return loss	$\leq -8\text{dB}$
Radiation	Omni-directional
Gain (peak)	4dBi
Polarization	Linear
Admitted Power	2W
Connector	IPEX1
Efficiency	40%~70%
Cable	RF $\Phi 1.13$ cable and length is 40 mm

2. Mechanical Specifications



Antenna made by FPC material and fixed to customer's product shell by bottom side adhesive,
Then through IPEX1 connector connect main board RF signal port.
RF $\Phi 1.13$ cable length 40mm.

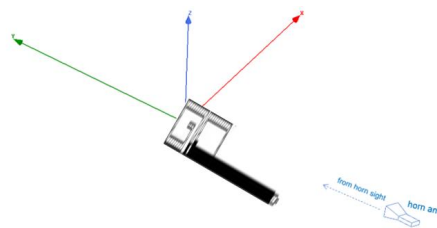
3. S-parameter



Return loss: $\leq -8\text{dB}$

VSWR: ≤ 2

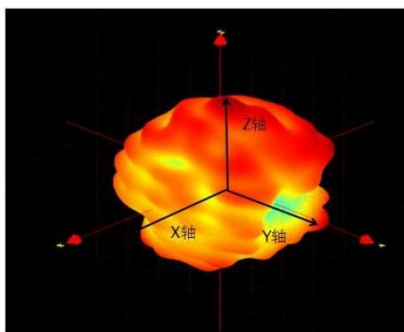
4. Radiation parameter



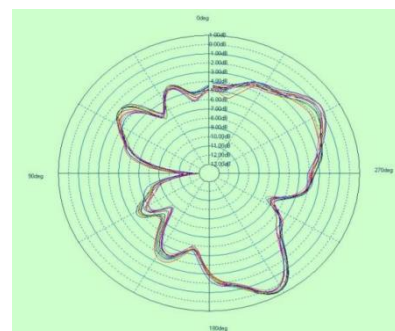
4.1 Gain and efficiency

Frequency	Gain	efficiency
2400~2500MHz	1~4dBi	45%~70%

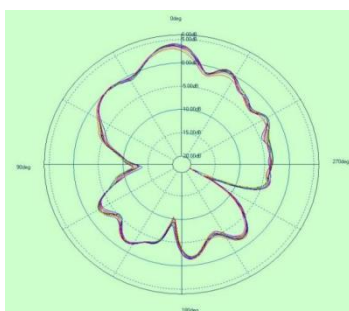
4.2 Radiation Pattern



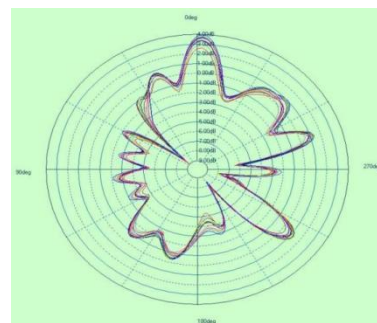
2G 3D radiation



2G XY plane



2G XZ plane



2G YZ plane