

# **LB-LINK Antenna Specification**

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**LB-LINK PN: 10018310**

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## Revision History

| Revision | Date       | Note    |
|----------|------------|---------|
| V1.0     | 2022/03/21 | Primary |

## Contents

|                                        |    |
|----------------------------------------|----|
| Antenna introducing .....              | P4 |
| Features .....                         | P4 |
| Antenna size.....                      | P4 |
| Antenna electrical properties.....     | P5 |
| Antenna total gain and efficiency..... | P5 |

## Antenna introducing

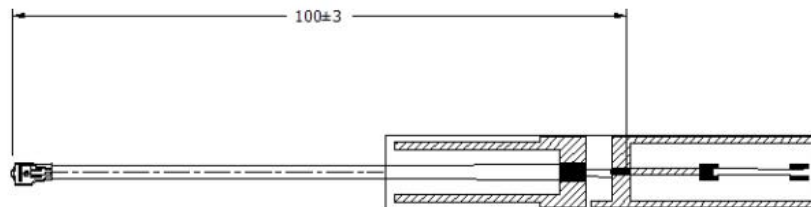
This antenna Made by PCB material, and work in 2.4~2.5GHz and 5.15~5.85GHz especially suit for WLAN system. Design by PIFA antenna theory, supply high gain ,high efficiency ,better port matching make wireless communication easily.

## Features

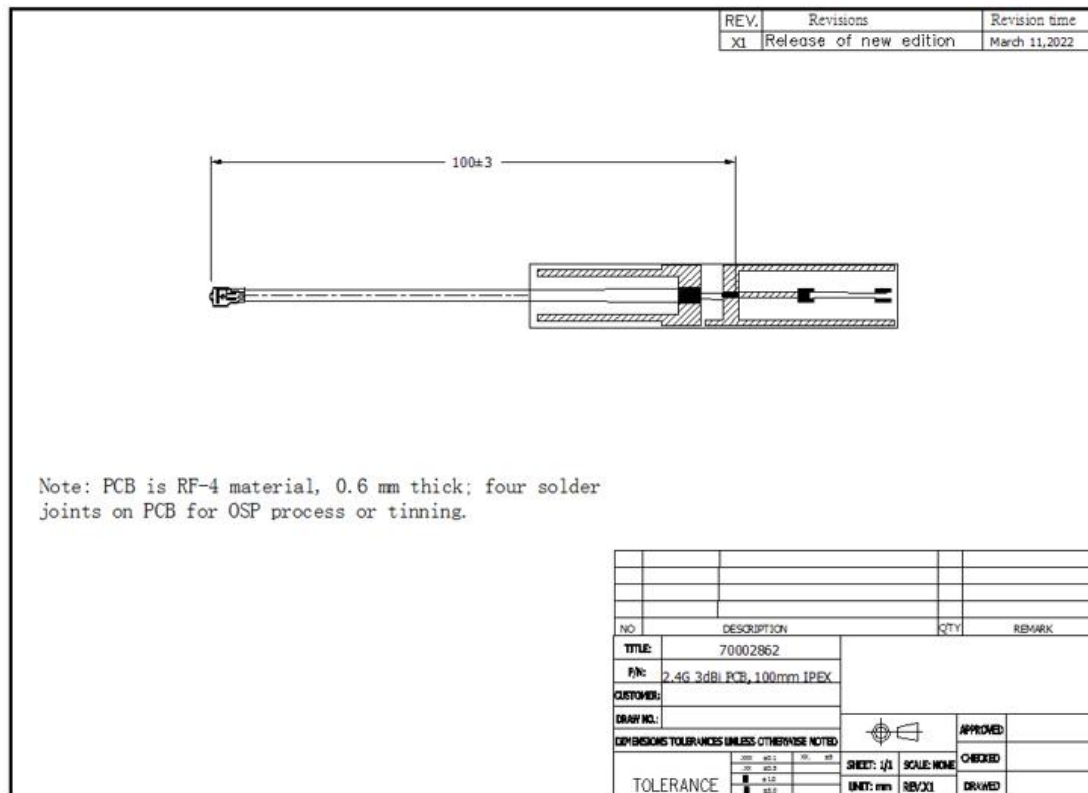
- IEEE802.11 b/g/n
- Peak gain 2.5dBI for 2.4G and 5G
- High efficiency
- Good port matching

## Antenna size

47mm\*8mm\*0.17mm



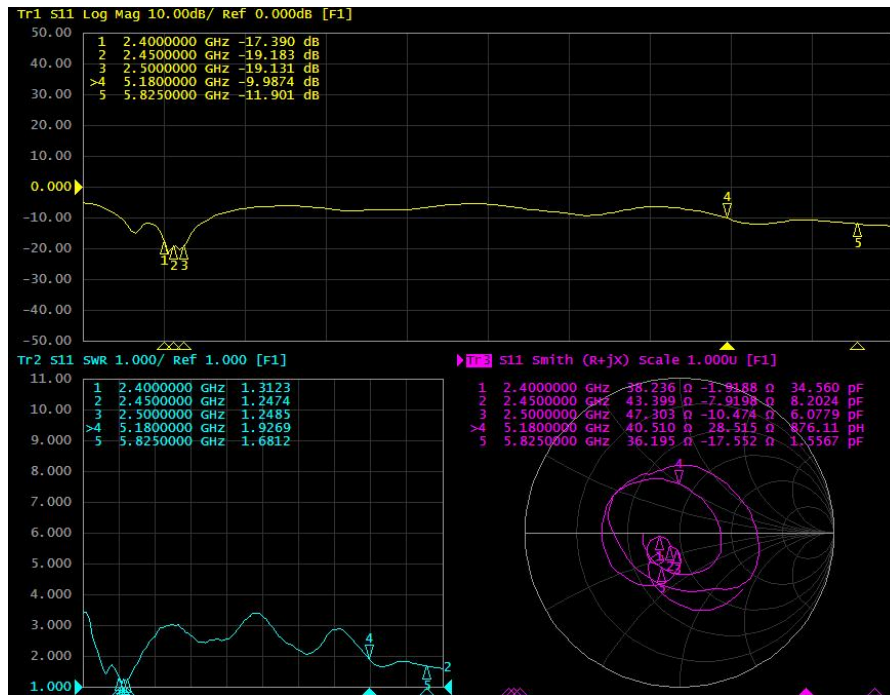
The cable is RF- $\Phi$ 1.13 cable with IPEX and length is 100mm



## Antenna electrical properties

|                |                                     |
|----------------|-------------------------------------|
| Frequency      | 2.4~2.5GHz & 5.15~5.85GHz           |
| Impedance      | 50ohm nominal                       |
| V.S.W.R        | ≤2                                  |
| Return loss    | ≤-8dB                               |
| Radiation      | Omni-directional                    |
| Gain(Peak)     | 2G:2.5dBi                           |
| Polarization   | Linear                              |
| Admitted Power | 2W                                  |
| Connector      | IPEX                                |
| Efficiency     | 50%~70%                             |
| Cable          | RF Φ 1.13 cable and length is 100mm |

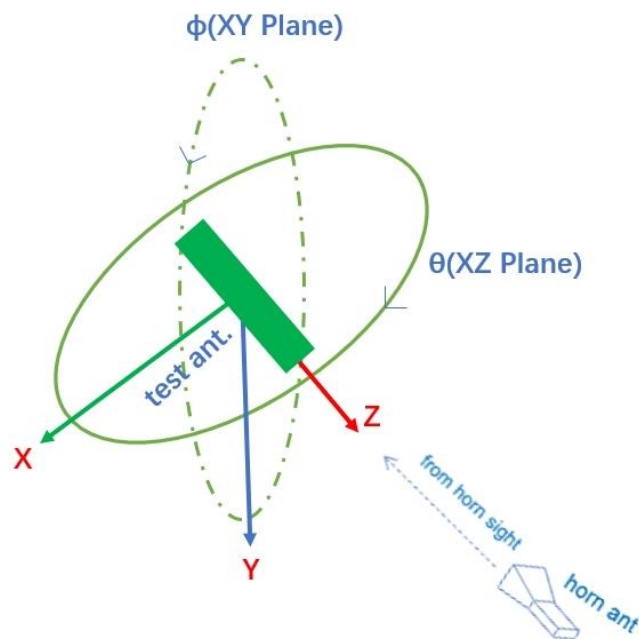
## Antenna S-parameter



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

VSWR:  $\leq 2$

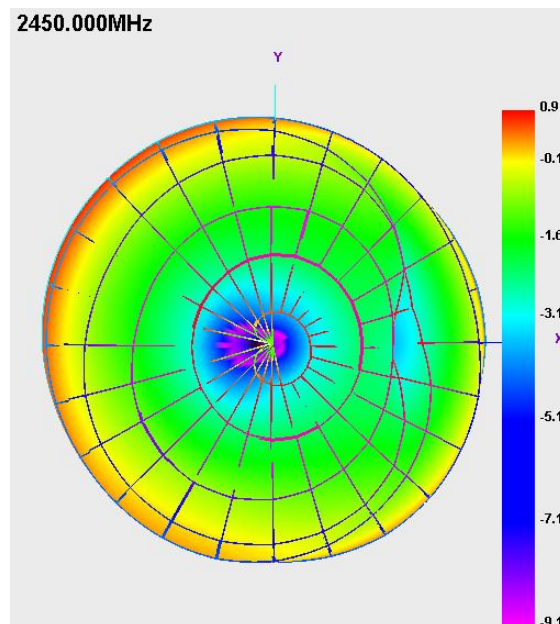
## Antenna Radiation parameter



## Antenna total gain and efficiency

|         | Freq. (MHz) | Gain (dBi) | Efficiency (%) |
|---------|-------------|------------|----------------|
| PCB_ANT | 2400        | 2.45       | 65%            |
|         | 2450        | 2.36       | 68%            |
|         | 2500        | 2.52       | 67%            |
|         | 5150        | 2.09       | 52%            |
|         | 5470        | 2.42       | 55%            |
|         | 5850        | 2.51       | 53%            |

## 2.4G Radiation Pattern



## 5G Radiation Pattern

