



# **TX4G-PCB-6613 User Manual**

**4G/LTE PCB Built-in Antenna IPEX-I Interface**



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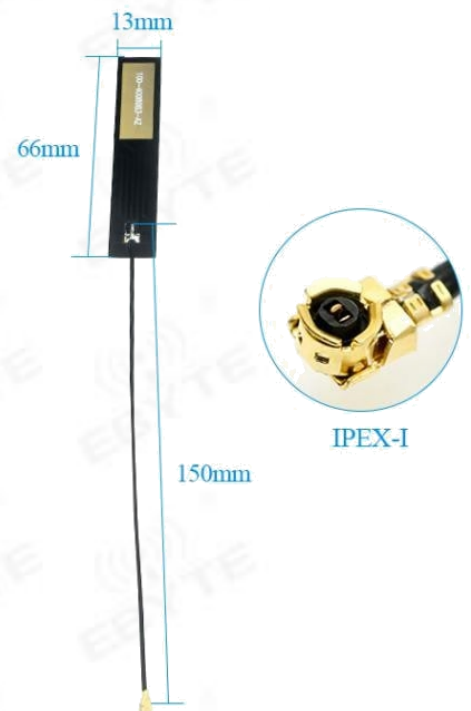
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# 1 Introduction

TX4G-PCB-6613 is a 4G/LTE frequency band PCB built-in antenna, size 66mm×13mm, IPEX-I interface, suitable for various 4G/LTE frequency equipment (mobile phone, SIM card, router)、 wireless module, with small size, can be builded in the module, the signal is stable.

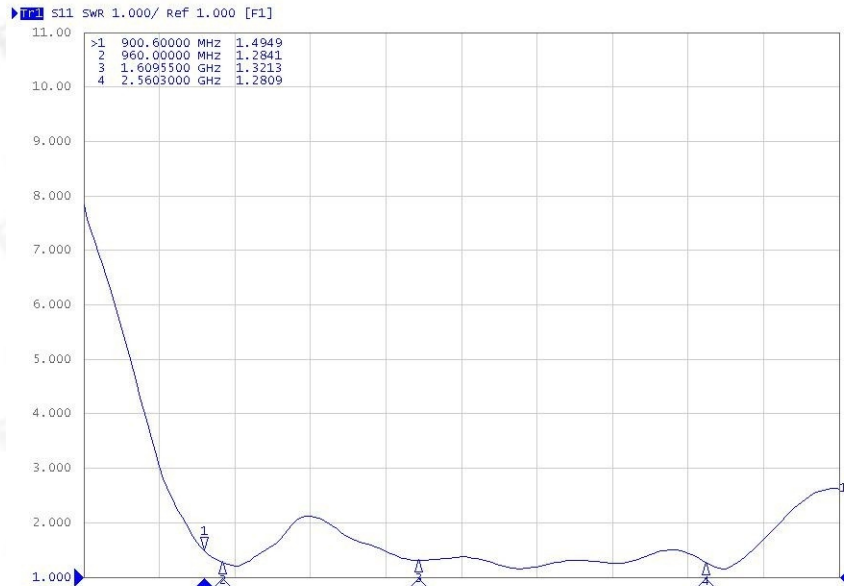
# 2 Parameters

| Electrical parameters       |                                   |
|-----------------------------|-----------------------------------|
| Frequency                   | 4G/LTE<br>800-960MHz;1710-2700MHz |
| Antenna gain                | 5dBi                              |
| Voltage standing wave ratio | ≤1.5                              |
| Polarization direction      | Linear polarization               |
| Radiation direction         | Omnidirectional                   |
| Input resistance            | 50Ω                               |
| Power capacity              | 5W                                |
| Other parameters            |                                   |
| Product size                | 66mm×13mm                         |
| Weight                      | 2g                                |
| Feeder material             | RF1.13                            |
| Length of the feeder        | 150mm (customizable)              |
| Antenna material            | PCB                               |
| Interface                   | IPEX-1                            |
| Operating temp.             | -40°C~+85°C                       |
| Storage temp.               | -40°C~+85°C                       |

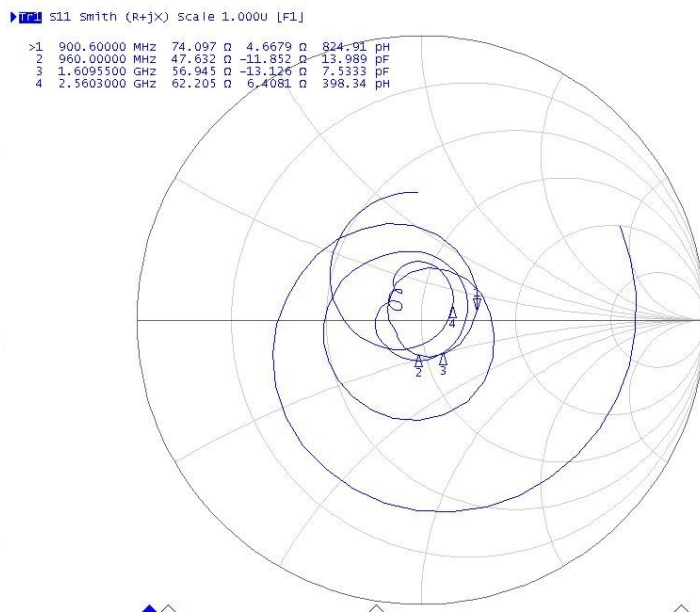


### 3 Antenna features

#### VSWR



#### Smith chart



## 4 FAQ

- The antenna frequency must match the frequency of the wireless device, otherwise the communication effect will be poor;
- The lower the communication frequency and the longer the wavelength, the better the diffraction performance;
- When there is a straight-line communication obstacle, the communication distance will be attenuated accordingly;
- Please pay attention to the antenna radiation direction, the incorrect installation direction of the antenna leads to a short transmission distance;
- The ground absorbs radio waves, and the test result near the ground is poor. It is recommended to increase the height;
- Sea water has a strong ability to absorb radio waves, so the seaside test results are not good;
- If there is a metal object near the antenna or placed in a metal shell, the signal attenuation will be very serious;
- The poor impedance matching between the antenna and the communication device will lead to poor communication effects.

## About us

Technical support: [support@cdebyte.com](mailto:support@cdebyte.com)

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Phone: +86 028-61399028

Web: [www.ebyte.com](http://www.ebyte.com)

Address: B5 Mould Park, 199# Xiqu Ave, High-tech District, Sichuan, China



**Chengdu Ebyte Electronic Technology Co.,Ltd.**