

APPROVAL SHEET

OverAir[®] FPC Antenna series
RoHS Compliance

PN:OA-FW1807-NB

Product Introduction

OA-FW1807-NB is a flexible FPC built-in antenna that operates at 820-960GHz with adhesive backing and coaxial cable. The size of the FPC antenna is 18*7mm, with a thickness of only 0.2mm (including the backing adhesive). Comes with RF0.81 coaxial cable, with smaller line loss and softer wire, with a length of 6cm and IPEX first generation interface.

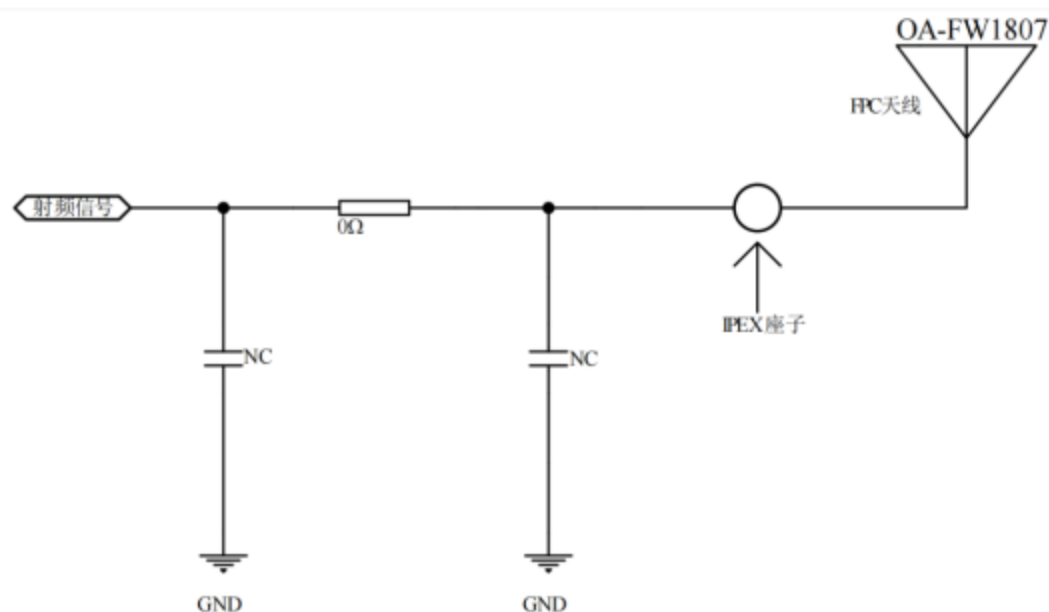
This antenna is suitable for various electronic products, communication devices, etc. that use 868/915 MHz (such as NBIOT, etc.) built-in antennas.

Specification

ELECTRICAL CHARACTERISTICS	
Working Frequency Range	820-960MHz
Gain(dBi)	2.42dB
Antenna Efficiency	55.21%
VSWR	<3
Polarization Direction	Vertical Polarization
Radiation Patterns	Omni
Input Impedance	50Ω
Power Capacity	5W
Dimensions	18.0*7.0*0.2mm
Thickness	0.2mm
Length	6cm
Material	FPC
Coaxial Line	RF0.81
Interface	IPEX1
Operation Temperature	-30℃ ~ +80℃

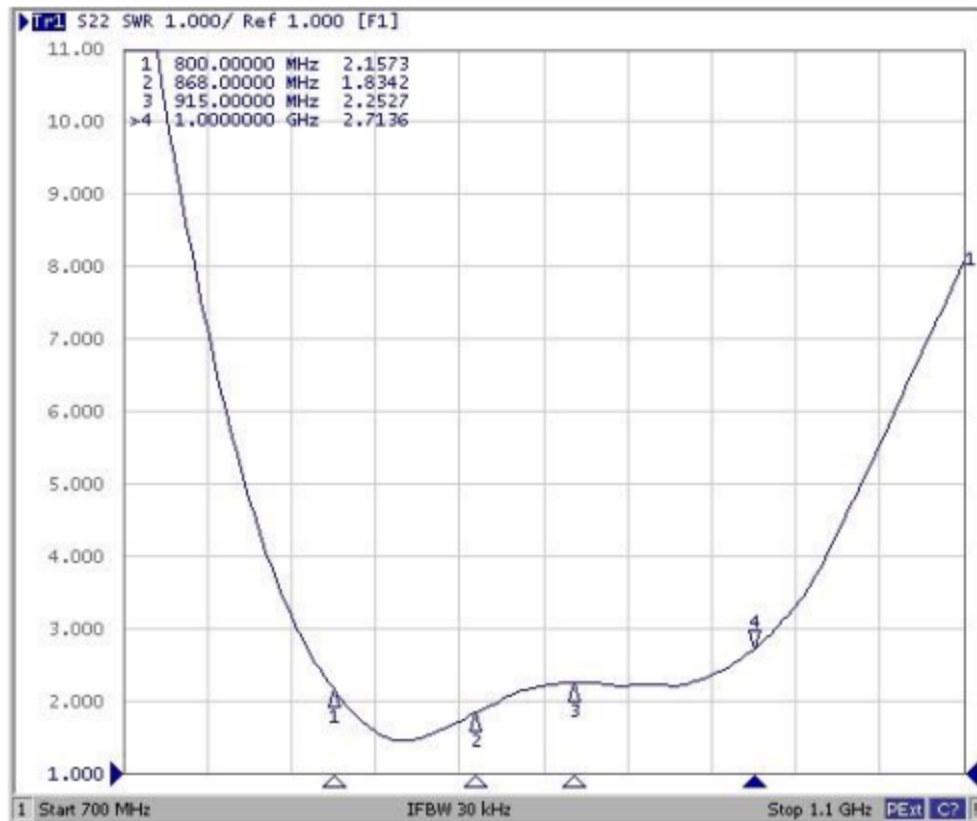


Schematic Design

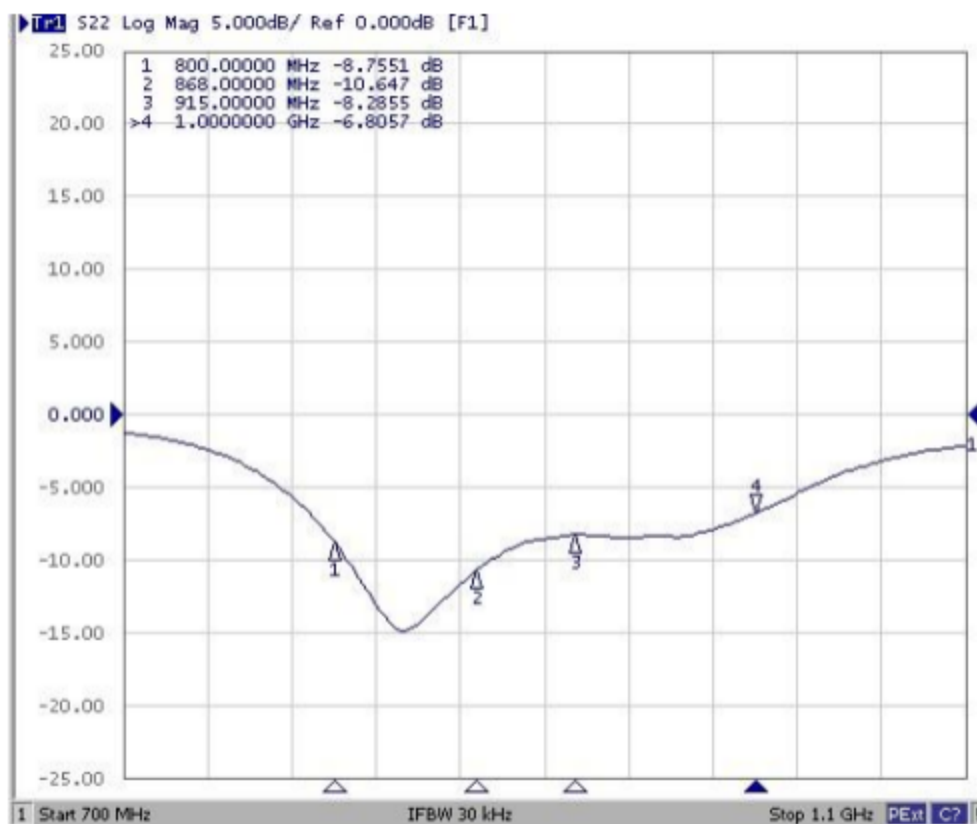


Characteristics

VSWR

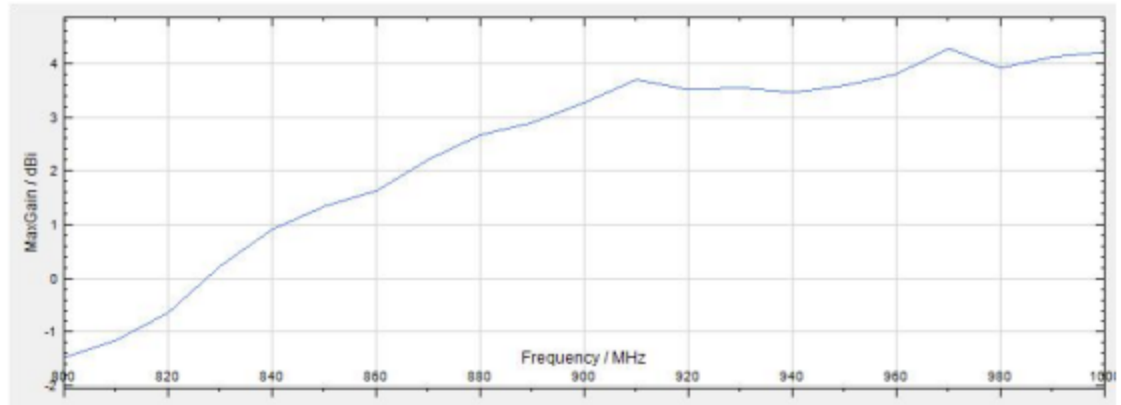


Return Loss

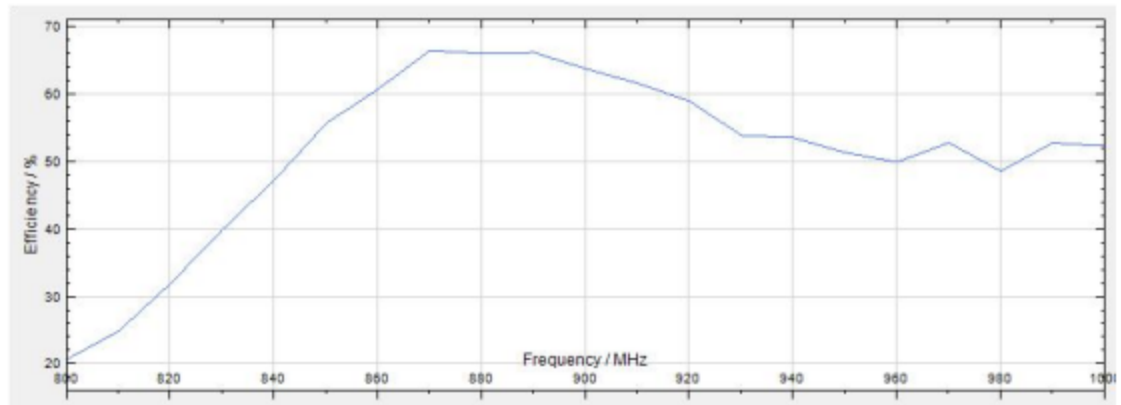


Efficiency and Gain

Gain

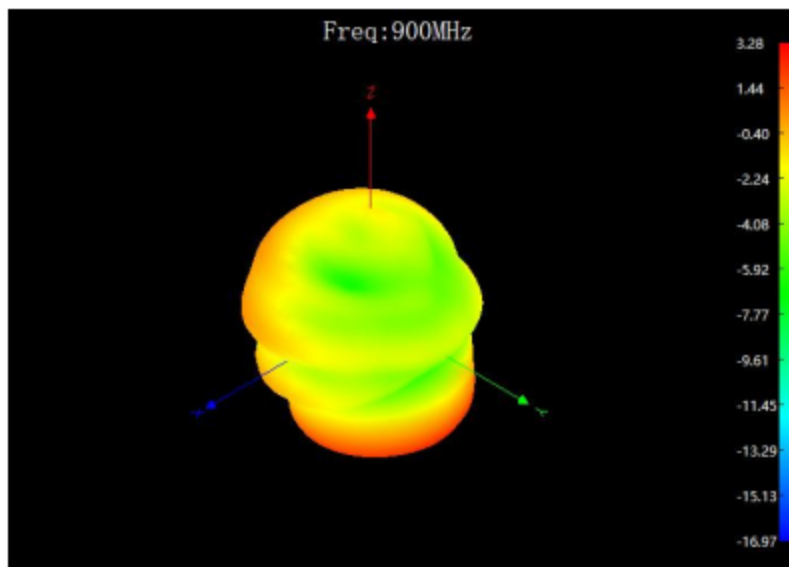
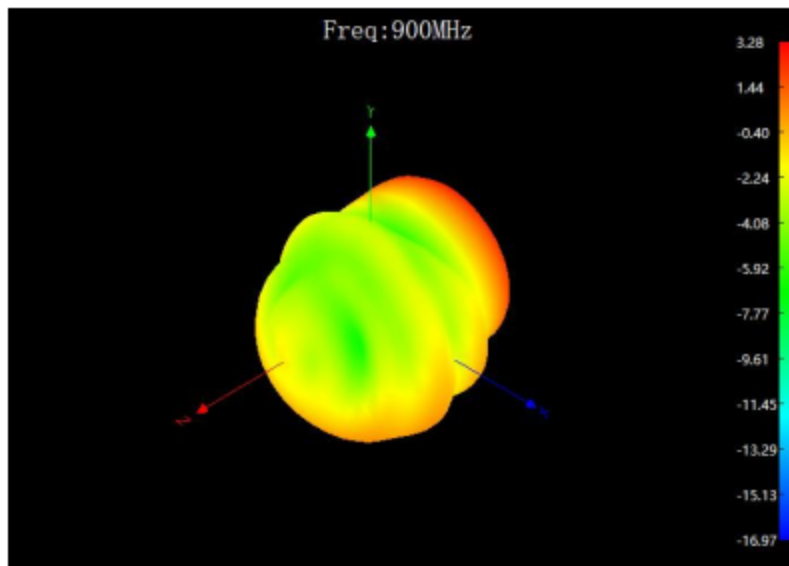
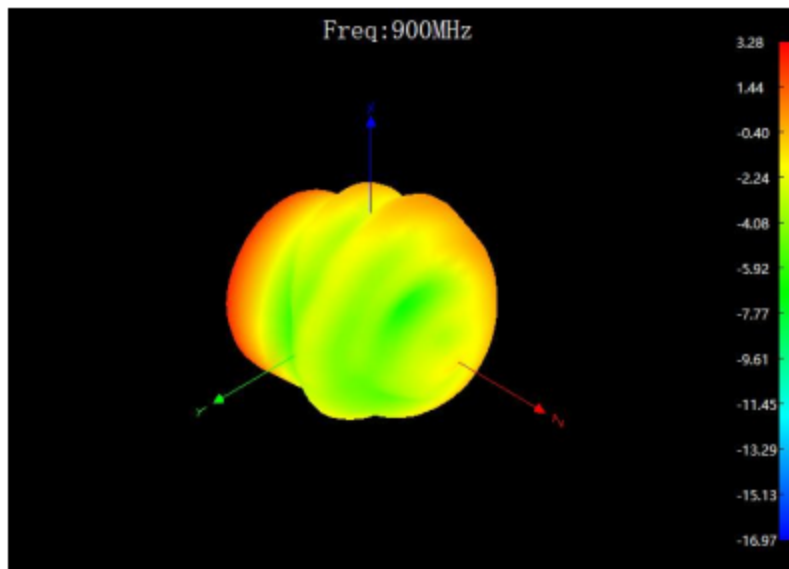


Efficiency



Frequency	820-960MHz
AvgGain	2.42dBi
MaxGain	3.81dBi
Efficiency	66.53%

Antenna Pattern



CAUTION

1. The antenna should be attached to the surface of the insulation inside the product, please do not attach the antenna body to the surface of the metal conductor.
2. The distance between the antenna body and the metal conductor should be no less than 3mm, and the larger the distance between the antenna body and the metal conductor, the better. The PCB board, as a conductor, also needs to be kept as far away as possible from the antenna.
3. Do not wrap the coaxial line of the antenna around the antenna body, otherwise it may cause a decrease in antenna performance.
4. The impedance of the antenna may be offset due to structural differences between different products, and a π - type impedance matching device can be reserved for debugging and improvement. If you encounter such a situation, you can contact our company for technical support.

Drawing of a Antenna

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产品技术参数 <table><tr><td>产品名称</td><td>柔性天线</td></tr><tr><td>材料</td><td>FPC</td></tr><tr><td>尺寸</td><td>18*7mm</td></tr><tr><td>线长</td><td>60mm</td></tr><tr><td>线类型</td><td>RF0, 81</td></tr><tr><td>接口</td><td>IPEX1</td></tr><tr><td>编号</td><td>OA-FW1807-NB</td></tr></table>										产品名称	柔性天线	材料	FPC	尺寸	18*7mm	线长	60mm	线类型	RF0, 81	接口	IPEX1	编号	OA-FW1807-NB																			
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Contact Us

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