



**Product Name:** ISM Band 868MHz / 915MHz Flexible PCB Antenna

**Part Number:** FP-C08-02

**Features:**

- ISM Band 868MHz / 915MHz Supporting for Sigfox and LoRa
- IPEX MHFI Connector
- Cable: 1.13 mm Mini-Coax
- RoHS & REACH Compliant

**Applications:**

- Smart Agriculture
- Smart Factory
- Smart Parking

# ISM Band 868MHz / 915MHz Flexible PCB Antenna

**MODEL: FP-C08-02**

WI-RD-D-216 V1.1

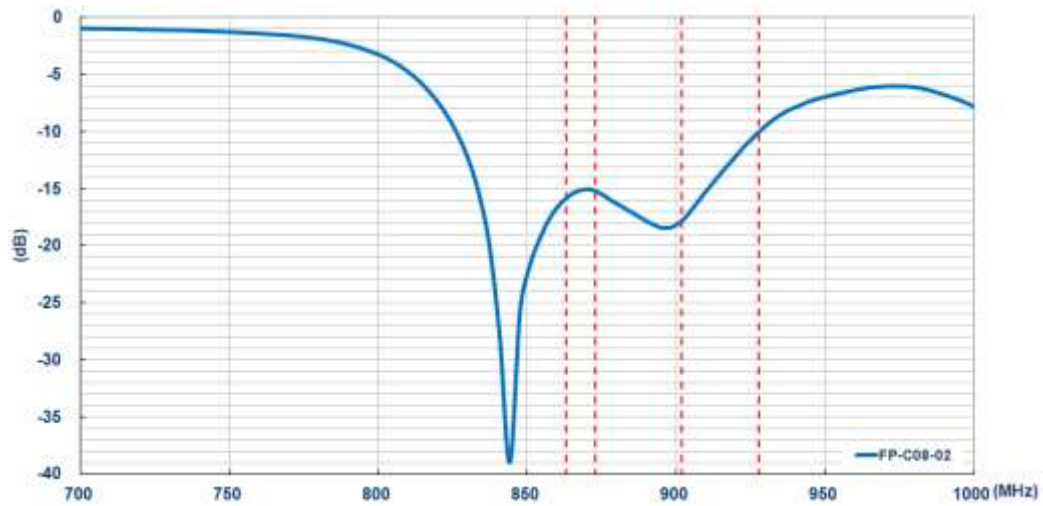
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## I. Specifications:

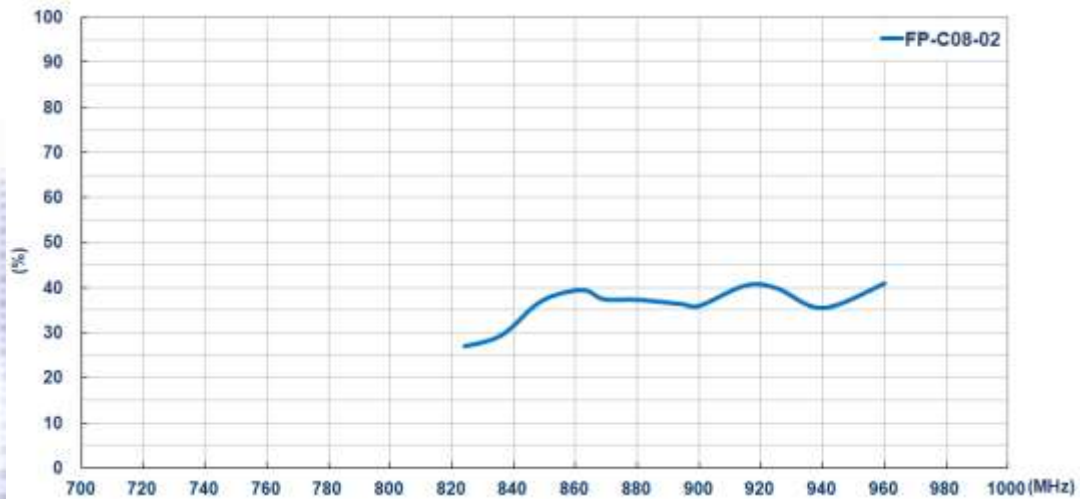
Category	Specifications					
<b>Electrical Characteristics</b>						
<b>Frequency (MHz)</b>	863.00	868.00	873.00	902.00	915.00	928.00
<b>Efficiency (%)</b>	40.09	37.41	34.91	37.76	40.46	36.90
<b>Average Gain (dBi)</b>	-3.97	-4.27	-4.57	-4.23	-3.93	-4.33
<b>Peak Gain (dBi)</b>	1.86	1.56	1.26	0.96	1.26	0.86
<b>V.S.W.R</b>	< 3					
<b>Return Loss (dB)</b>	< -6					
<b>Test Condition</b>	On the 2mm ABS					
<b>Impedance (Ω)</b>	50					
<b>Polarization</b>	Linear					
<b>Physical Condition</b>						
<b>Dimension (mm)</b>	60(L) x 20(W) x 0.25(T)					
<b>Connector</b>	IPEX MHFI					
<b>Cable</b>	1.13 mm Mini-Coax					
<b>Cable Length (mm)</b>	100					
<b>Environmental Conditions</b>						
<b>Operation Temperature</b>	-40 ~ +85 °C					
<b>Storage Temperature</b>	-40 ~ +85 °C					
<b>Relative Humidity</b>	95% non-condensing					

## II. Antenna Technical Parameters:

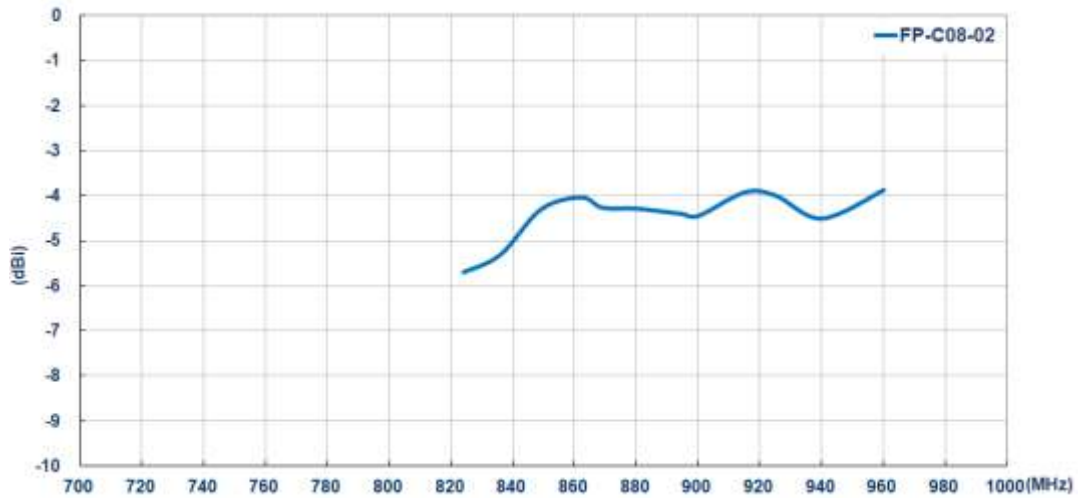
S11-parameters (dB)



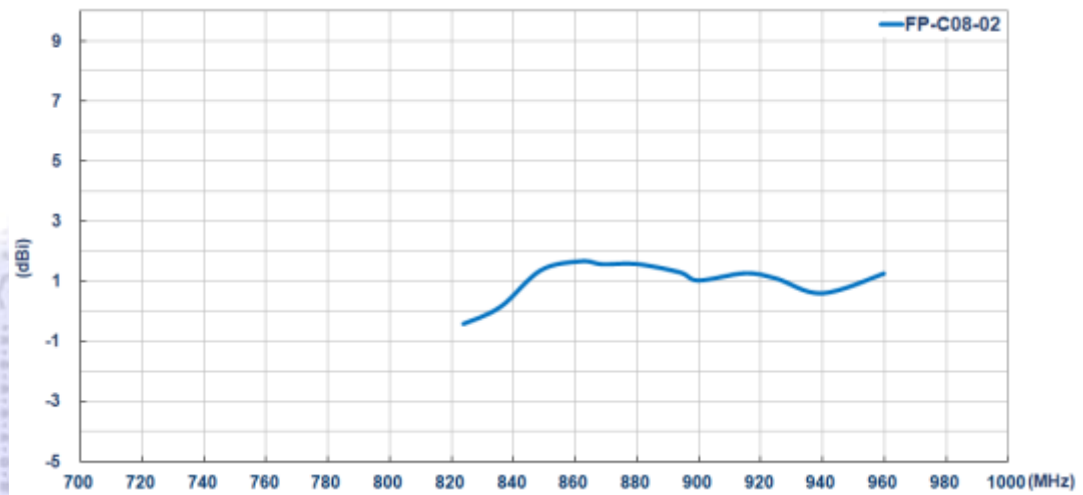
Efficiency (%)



Average Gain (dBi)

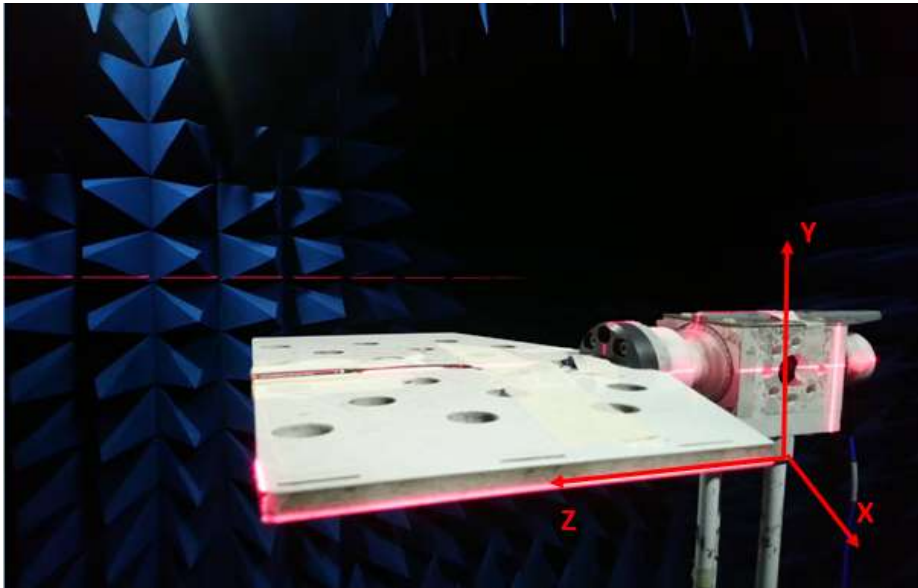


Peak Gain (dBi)



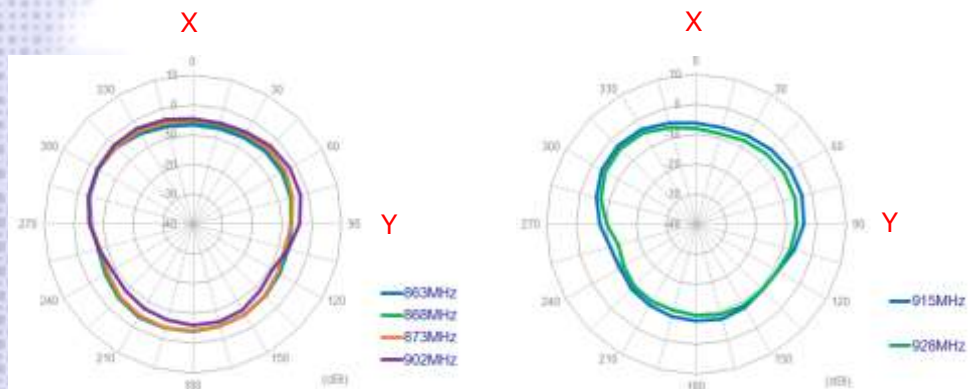
### III. Antenna Radiation Pattern Measurement:

The antenna radiation patterns were measured in certified Anechoic Chamber. The measurement setup as below,

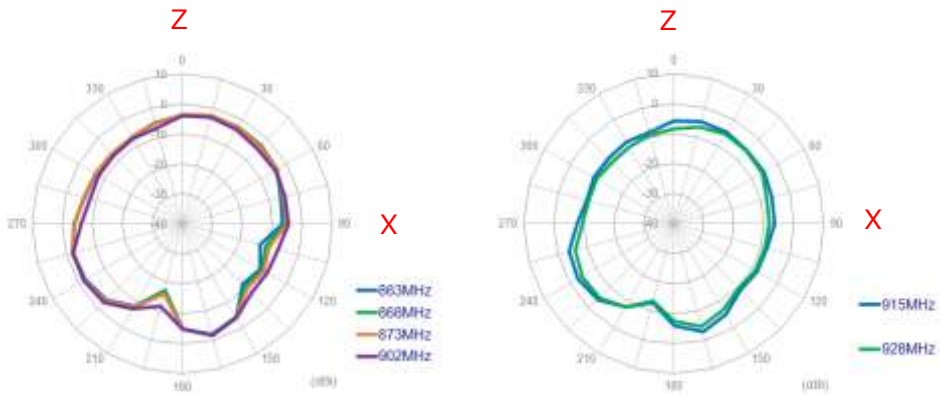


### IV. 2D Radiation Pattern:

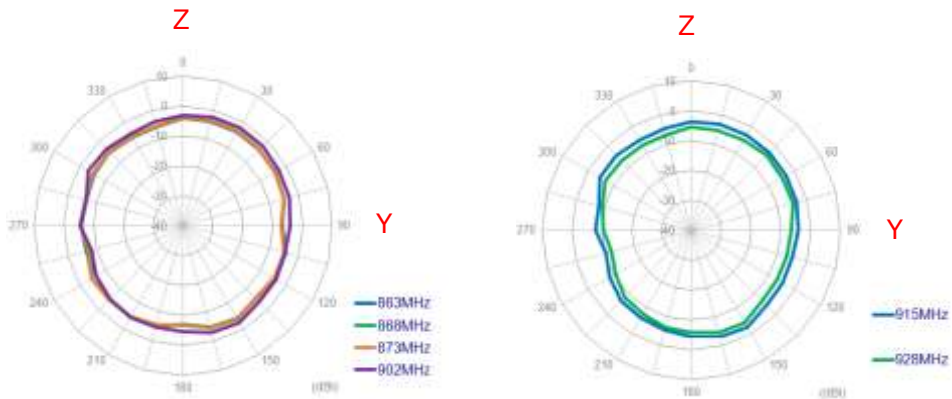
X-Y Plane



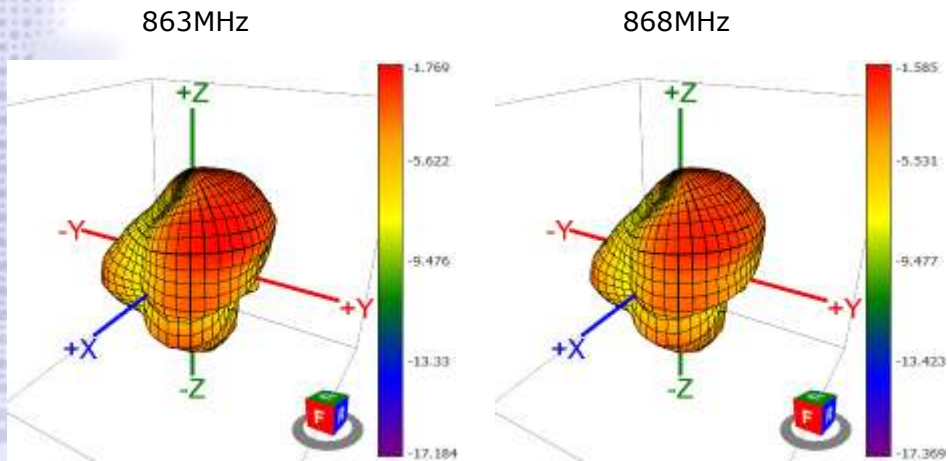
X-Z Plane



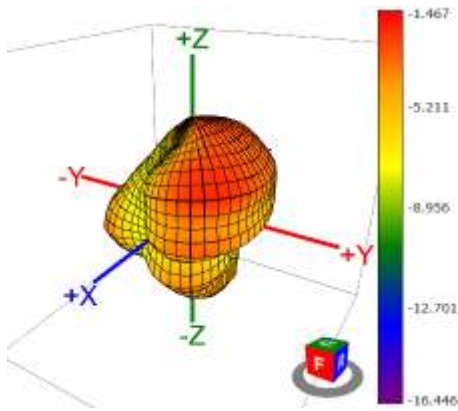
Y-Z Plane



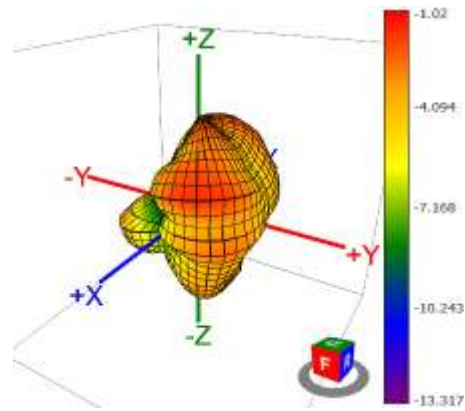
## V. 3D Radiation Pattern:



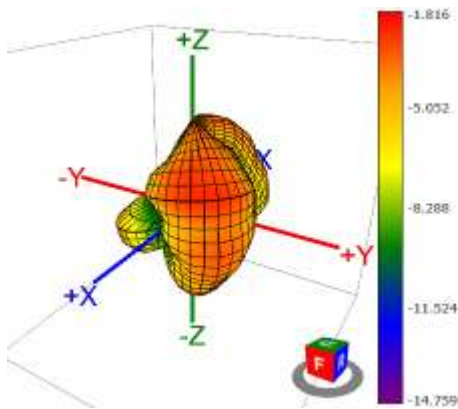
873MHz



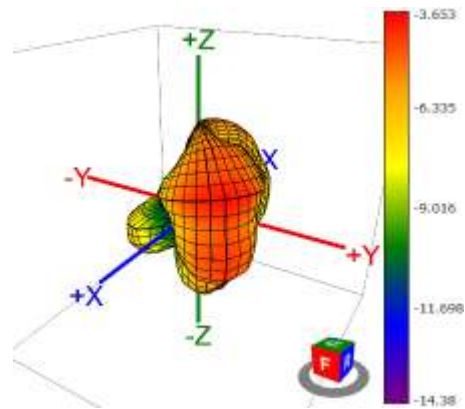
902MHz



915MHz

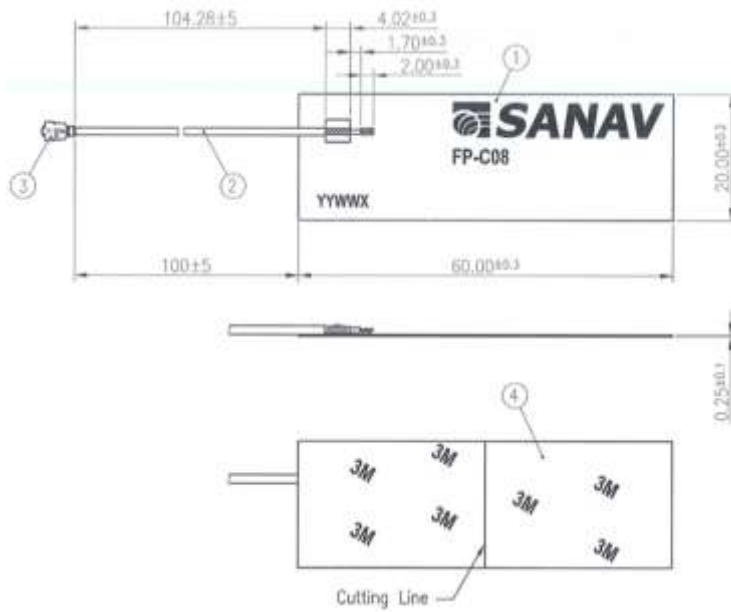


928MHz



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## VI. Mechanical Drawing (Unit:mm):



4	Double-Sided Adhesive	3M 467	Brown Liner	1
3	IPEX MHF(20278-112R-13)	Brass	Au Plated	1
2	1.13 Coaxial Cable	FEP	Black	1
1	FP-C08 PCB	Polymer 0.25t	Black	1
No	NAME	MATERIAL	FINISH	Q'TY