

## Specification

Part No. : **PC31.07.0050A**

Product Name : Dual-Band ISM 868/915MHz FR4 antenna with 50mm  
Ø1.13 IPEX MHF (U.FL comp)

Feature : High Efficiency FR4 Antenna  
90mm\*55mm\*0.8mm  
ISM 868/915MHz  
RoHS Compliant



## 1. Introduction

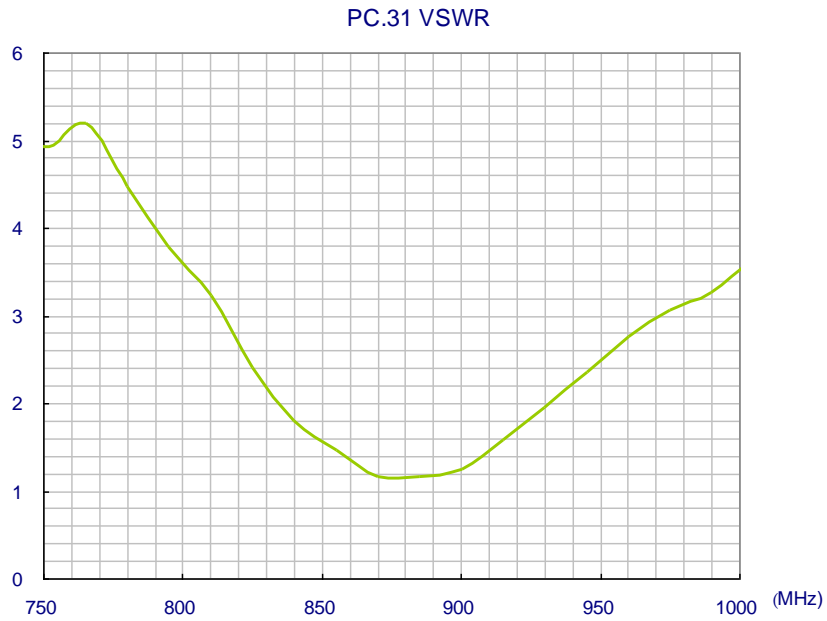
This high gain, low profile, PCB antenna and mini coaxial cable is an 868MHz ~ 928MHz ISM dual-band Omni-directional antenna intended for use in 868MHz and 915MHz applications. It is optimized for free space to be tested as a performance benchmark. The high efficiency dual-band characteristics allow the client device to be used in countries with different regulatory bands. Cable and optional double-sided adhesive foam mounting allows flexible placement. Further performance enhancement can be done through tuning upon receipt of client’s housing and board.

## 2. Specification

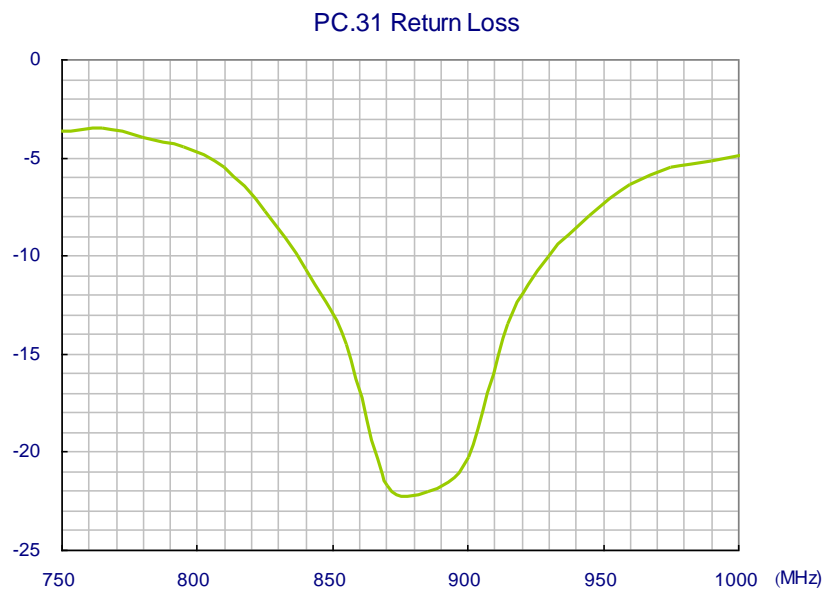
ELECTRICAL		
Communication System	ISM 868	ISM 915
Frequency (MHz)	868 ~ 870	902 ~ 928
Average efficiency	0.87	0.77
Average gain	2.3dBi	1.6dBi
Impedance	50 Ohm	
Polarization	Linear	
MECHANICAL		
Antenna Length	90*55*0.8 mm	
Connector	IPEX MHF	
ENVIRONMENTAL		
Operation Temperature	-40°C to 85°C	
Storage Temperature	-40°C to 85°C	

### 3. Antenna Characteristics

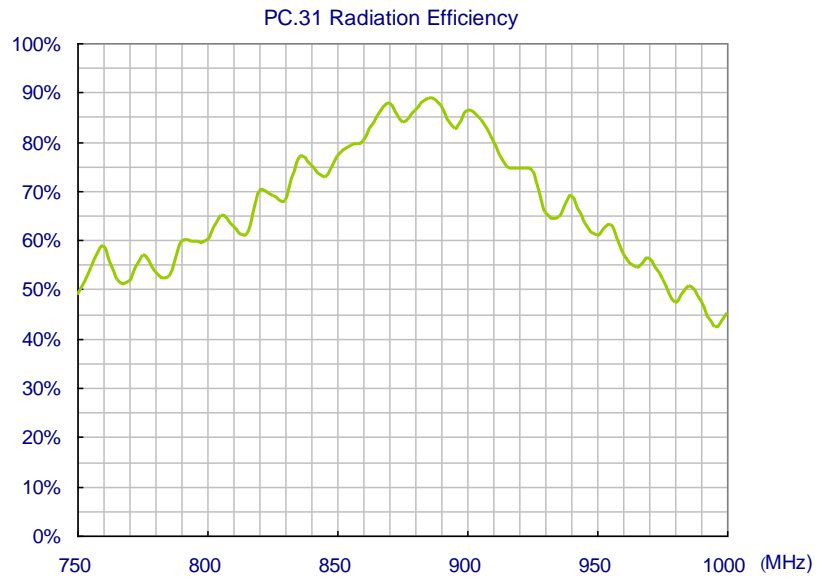
#### 3.1. VSWR



#### 3.2. Return Loss

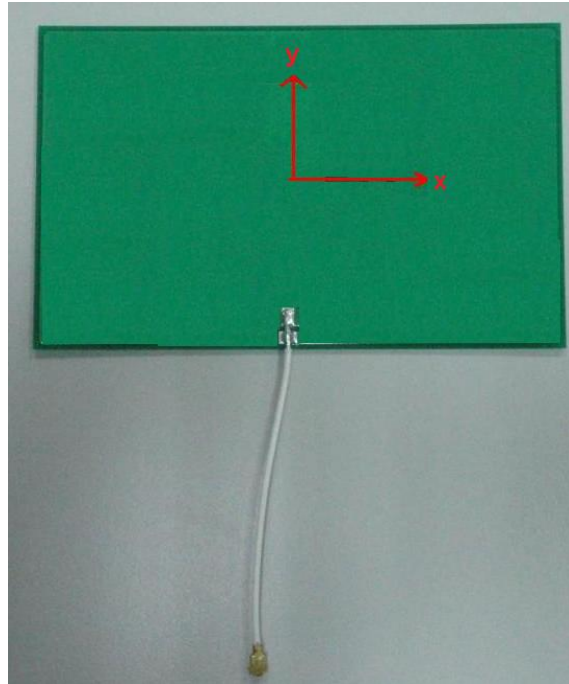


### 3.3. Efficiency

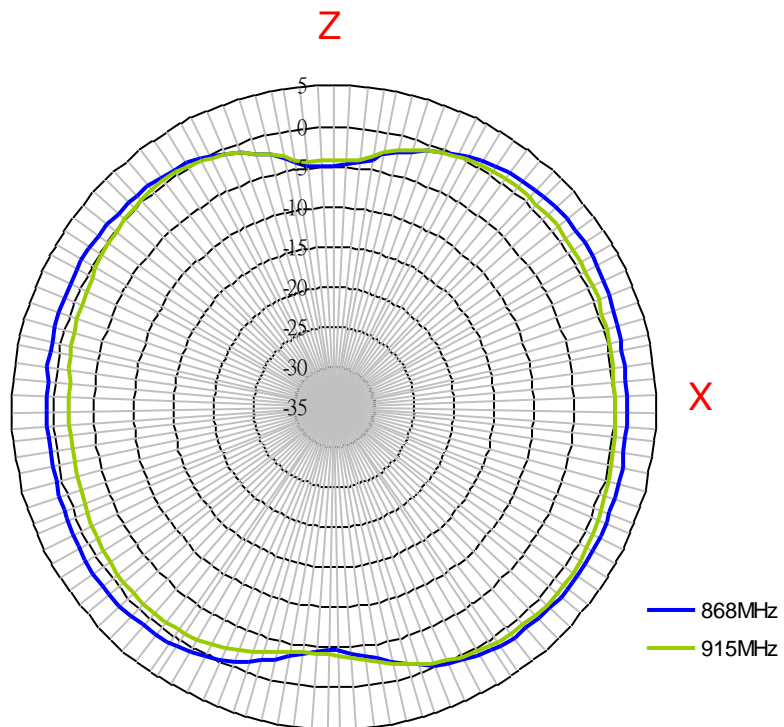
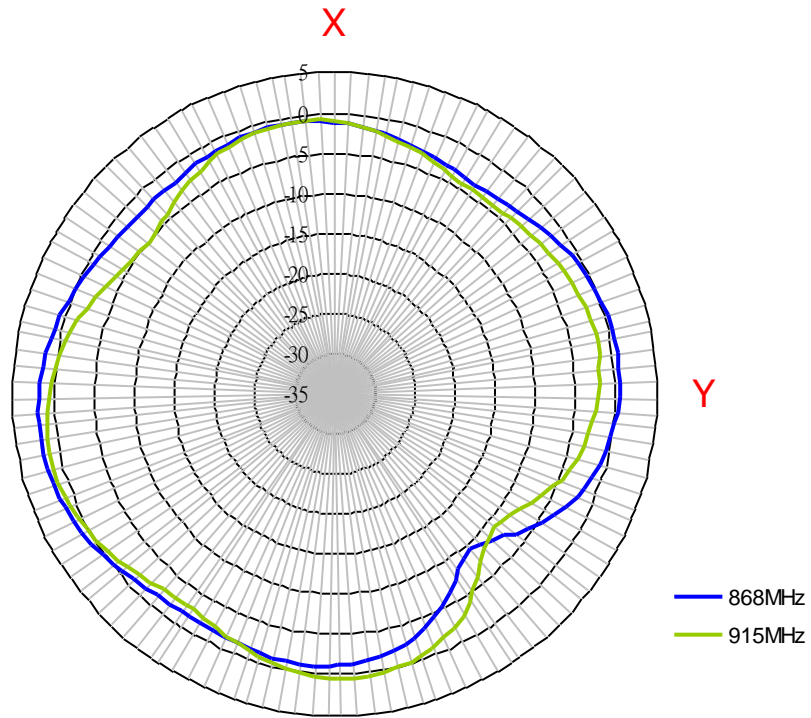


## 4. Antenna Radiation Patterns

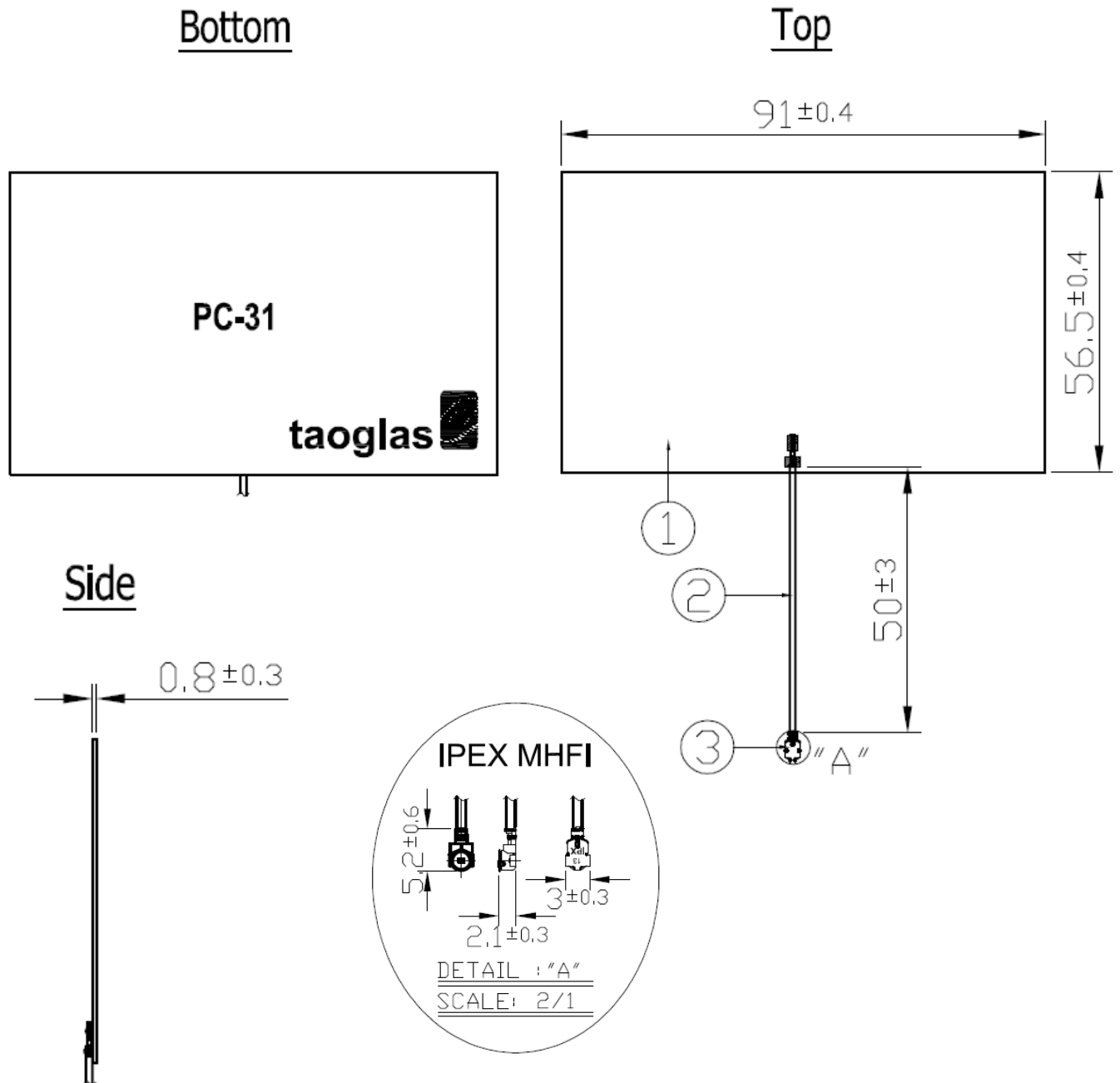
### 4.1. Antenna Setup



## 4.2. Radiation Pattern



## 5. Mechanical Drawing (Unit: mm)



	Name	P/N	Material	Finish	QTY
1	PC31 PCB	100212L050005A	FR4 0.8t	Green	1
2	1.13 Coaxial Cable	300313A000002A	FEP	White	1
3	IPEX MHFI (U,FL)	204111G000002A	Brass	Gold	1

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