



Wi Fi

RoHS
Compliant

Product Name: External Screw Mount One Port WiFi Antenna

Part Number: EW-21B-AC-W01

Features:

- Support WiFi 2.4GHz
- Cable Length & Connector are customizable
- Robust Enclosure, IPX7 Waterproof Resistant
- RoHS & REACH Compliant

Application:

- Machine to Machine Communication & IOT Application

External One Port WiFi Antenna

MODEL: EW-21B-AC-W01

WI-RD-D-250 V1.2

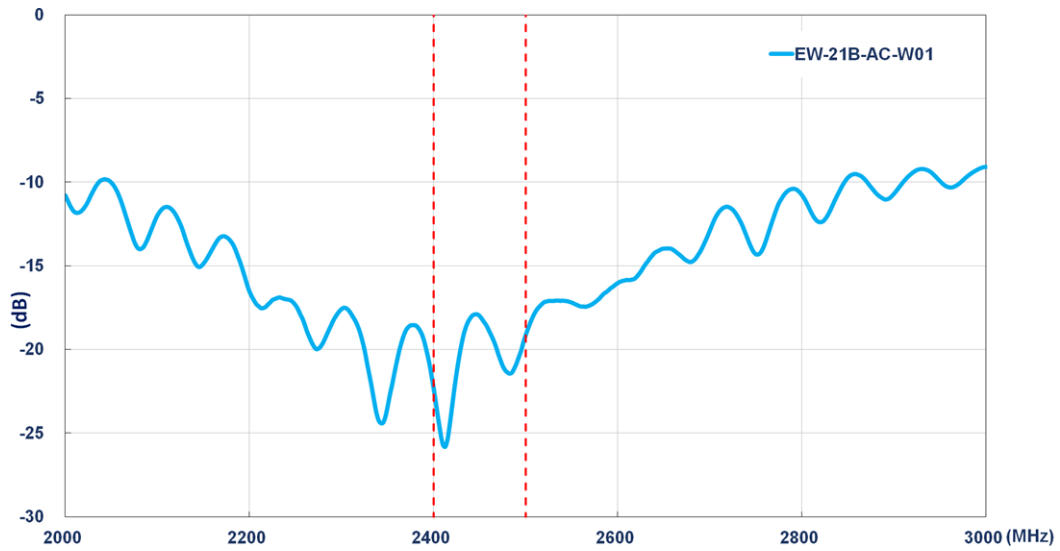
I. Specifications:

Items	Specifications		
WiFi Electrical Characteristics			
Polarization	Linear		
Frequencies (MHz)	2400	2450	2500
Efficiency (%)	53.35	57.13	56.04
Average Gain (dBi)	-2.73	-2.43	-2.51
Peak Gain (dBi)	2.28	3.22	3.43
V.S.W.R	< 2		
Return Loss (dB)	< -10		
Impedance (Ω)	50		
Cable / Length	H-100_1.5 meters		
Connector	RSMA (Male)		
Dimension (mm)	ϕ 65(D) x 21.5(H)		
Environmental Conditions			
Operation Temperature	-40 ~ +85 °C		
Storage Temperature	-40 ~ +85 °C		
Waterproof Resistant	IPX7		
Relative Humidity	95% non-condensing		

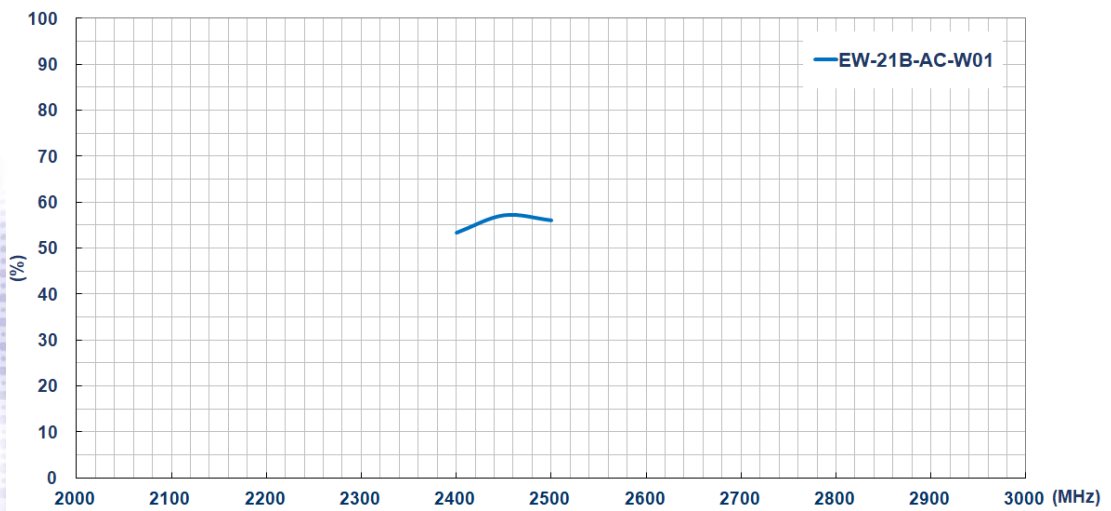
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II. Antenna Technical Parameters:

S11 (dB)

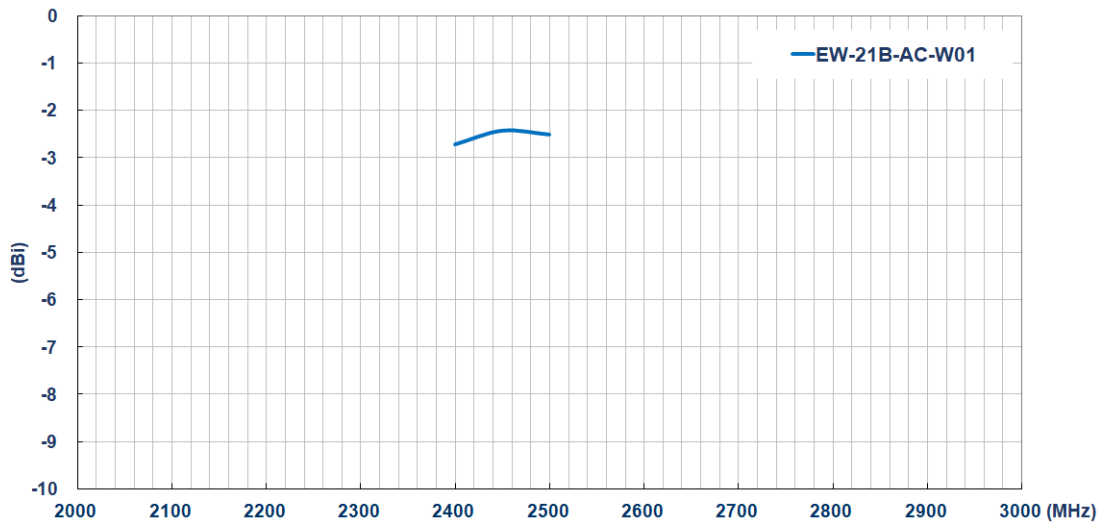


Efficiency (%)



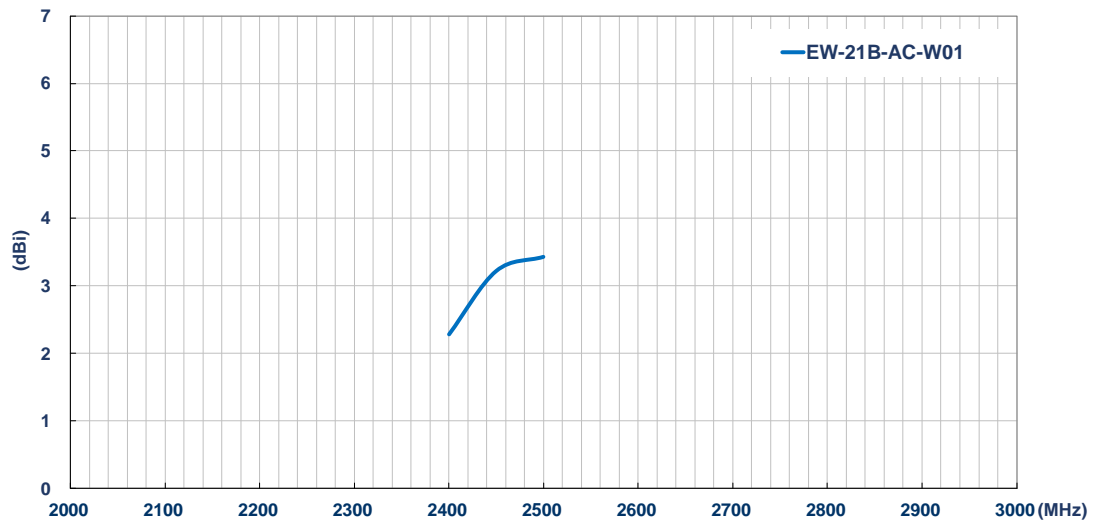
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Average Gain (dBi)



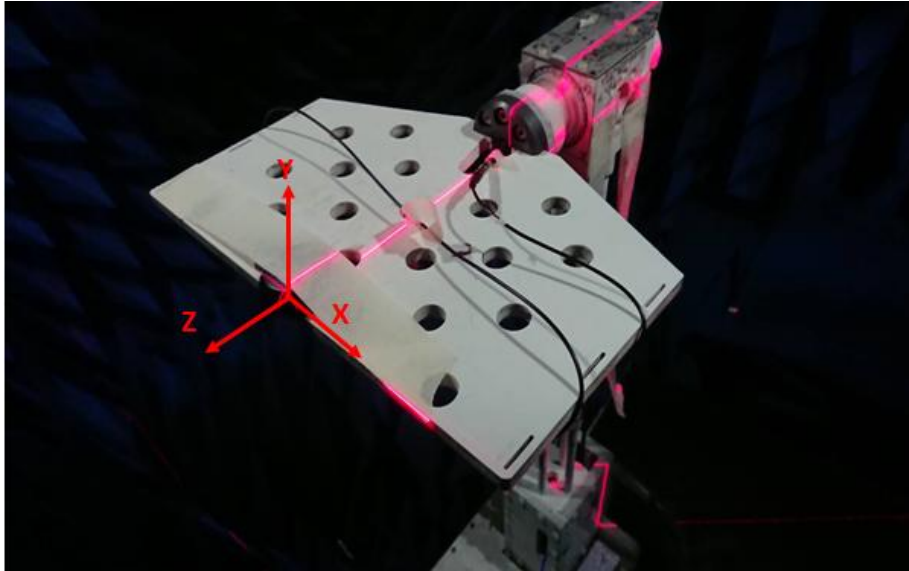
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Peak Gain (dBi)



III. Antenna Radiation Pattern Measurement:

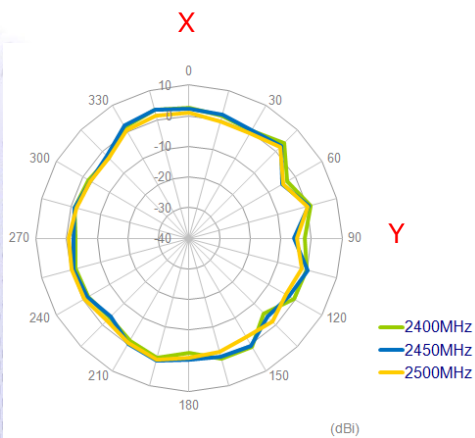
The antenna radiation patterns were measured in Anechoic Chamber. The measurement setup as below,



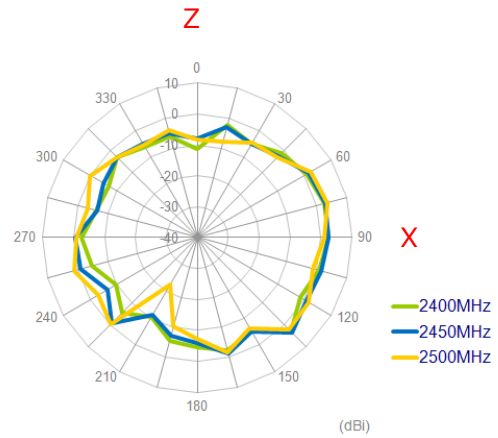
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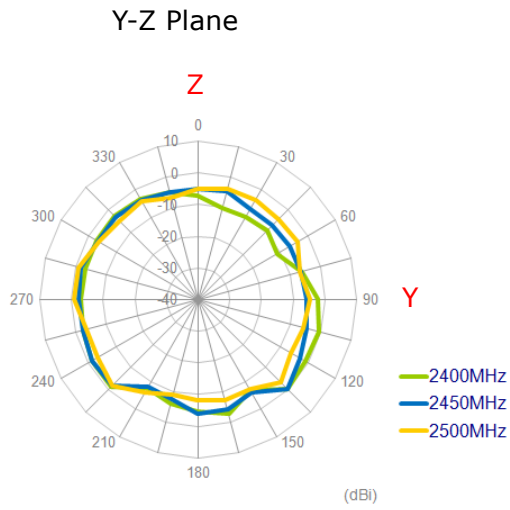
IV. 2D Radiation Pattern:

X-Y Plane

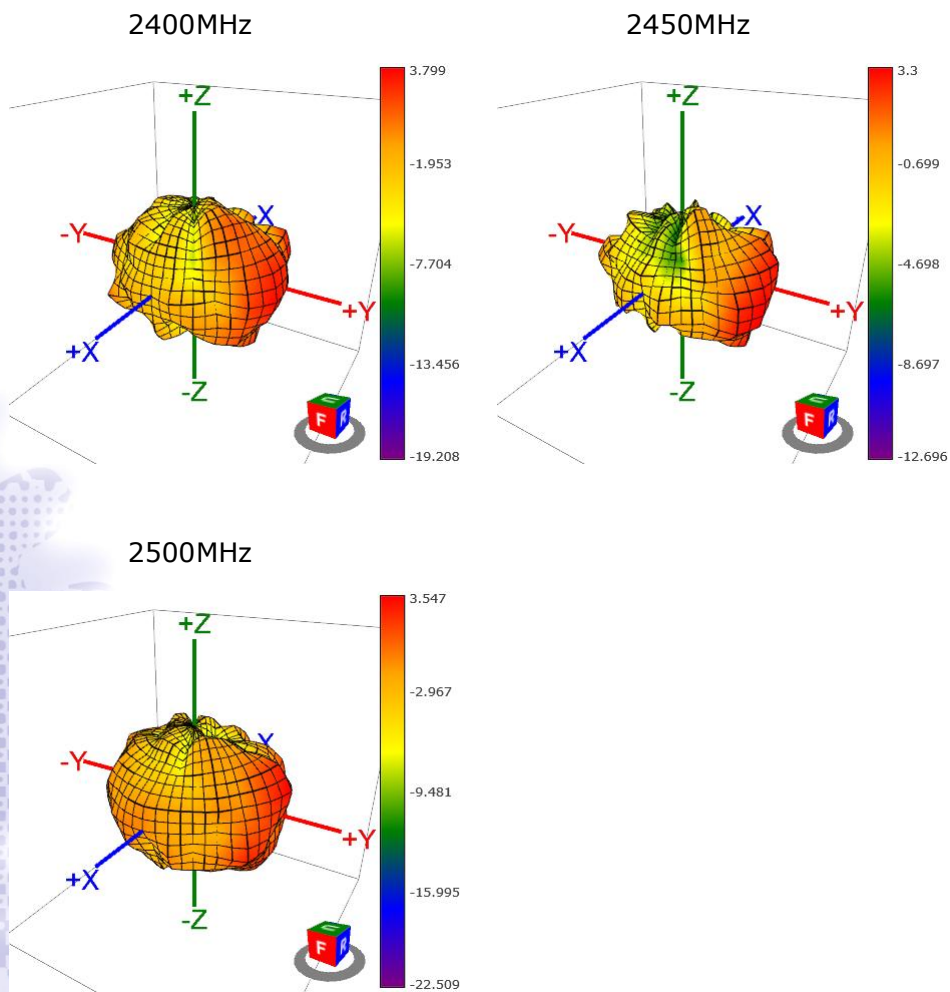


X-Z Plane

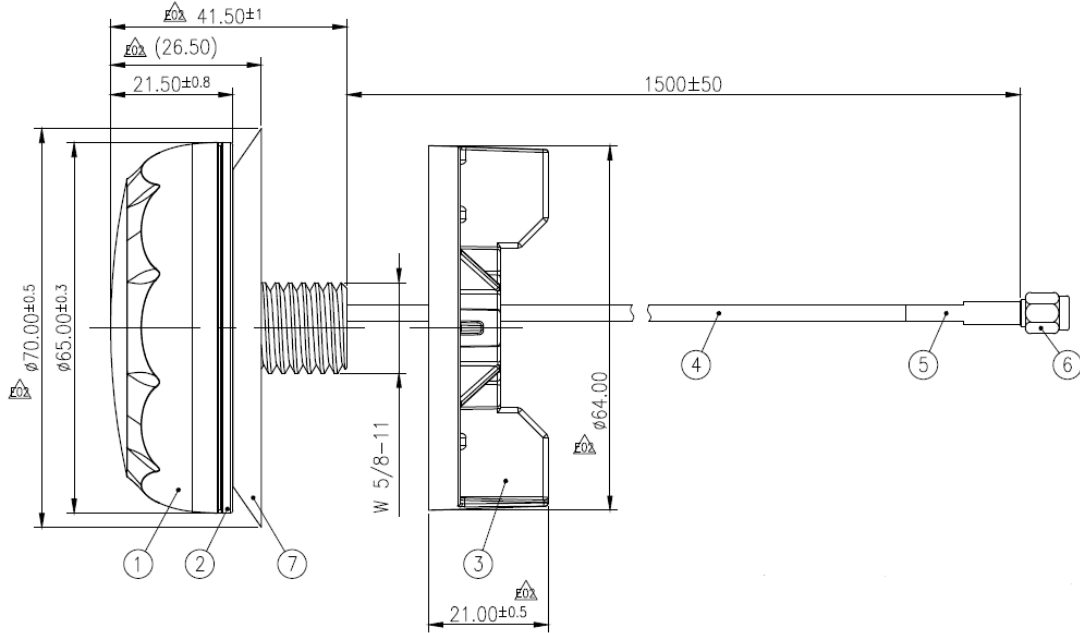




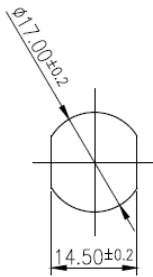
V. 3D Radiation Pattern:



VI. Mechanical Drawing (Unit:mm):



Notes:
1. All material must be RoHS compliant.

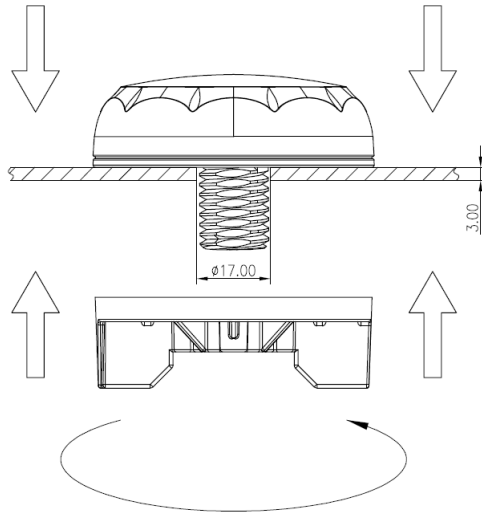


Recommend assembly hole diameter

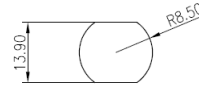
No	NAME	MATERIAL	FINISH	QTY
7	AU-3C Waterproof Gasket	Silicone	Black	1
6	RP-SMA(M) Connector	Brass	Au Plated	1
5	Heat Shrink Tube	EVA	Black	1
4	Cable H-100	PVC	Black	1
3	SJ-4C Nut	ABS	Black	1
2	SJ-4C Bottom Housing	ABS	Black	1
1	SJ-4C Top Housing	ABS	Black	1

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VII. Recommended Installation Method



*Recommended torque for mounting is 18kgf
Maximum torque for mounting is 23kgf



*Recommended installation hole dimension

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