2JW1102-C943B

(Alpha Micro Part No. AMC2JW1102-C943B)

2.4/5.0/6.0GHz connector mount antenna

Features

- 2.4/5.0/6.0GHz ISM:
  - 2410 – 2490MHz
  - 4920 – 7125MHz
- Connector mount
- Wi-Fi 6E antenna
- High gain
- High throughputs
- Low latency
- Ground plane independent
- Hinged connector
- Dimensions: 135 x 19 x 10mm

Wi-Fi 6E offers lower power consumption, higher data rates with peak gigabit speeds, increased capacity with reduced latency that supports higher volumes of users and devices, making it ideal for the next-gen commercial and residential wireless applications. This is a substantial improvement for routers, gaming and IoT devices.

The 2JW1102-C943B caters to 2.4/5.0/6.0, Wi-Fi, Wi-Fi 6, Wi-Fi 6E,Bluetooth, ZigBee, ISM, Sigfox and LoRa standards and is backwards compatible, allowing computing and mobile devices to reach exceptional signal quality, operating within 2410 MHz to 7125 MHz frequencies. This powerful antenna combines high gain and efficiency for optimal antenna performance where uninterrupted signal strengths and high bandwidths are desired, even in very crowded networks.

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1. Antenna and Electrical Specifications

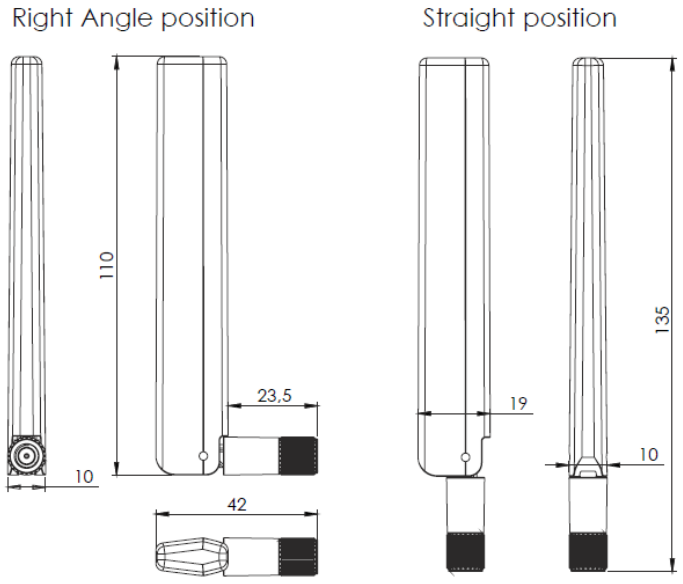
Parameters	2.4/5.0/6.0GHz antenna		
Standards	Wi-Fi 6E, Bluetooth, ZigBee, ISM, Sigfox, LoRa		
Band (GHz)	2.4	5.0	6.0
Frequency (MHz)	2410 - 2490	4920 - 5925	5925 - 7125
Return loss (dB)	~-17.1	~-12.3	~-9.9
VSWR	~1.4:1	~1.7:1	~2.0:1
Efficiency (%)	~75.8	~84.5	~73.0
Peak gain (dBi)	~4.1	~3.9	~2.8
Average gain (dB)	~-1.2	~-0.7	~-1.4
Impedance (Ohms)	50		
Polarization	Linear		
Radiation pattern	Omni-Directional		
Max. input power (W)	25		
Connector type	RP-SMA male standard (other connectors available)		

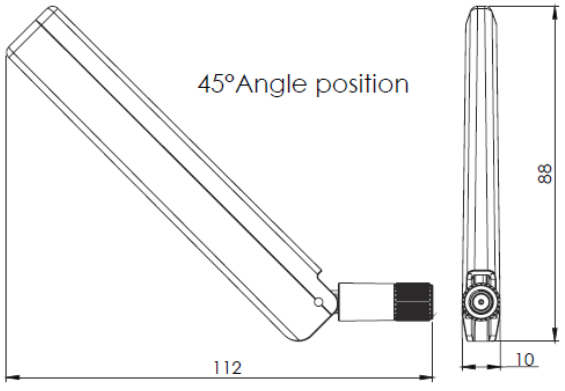
Measurement Conditions:

- Free space
- Measured in certified CTIA 3D Anechoic chamber

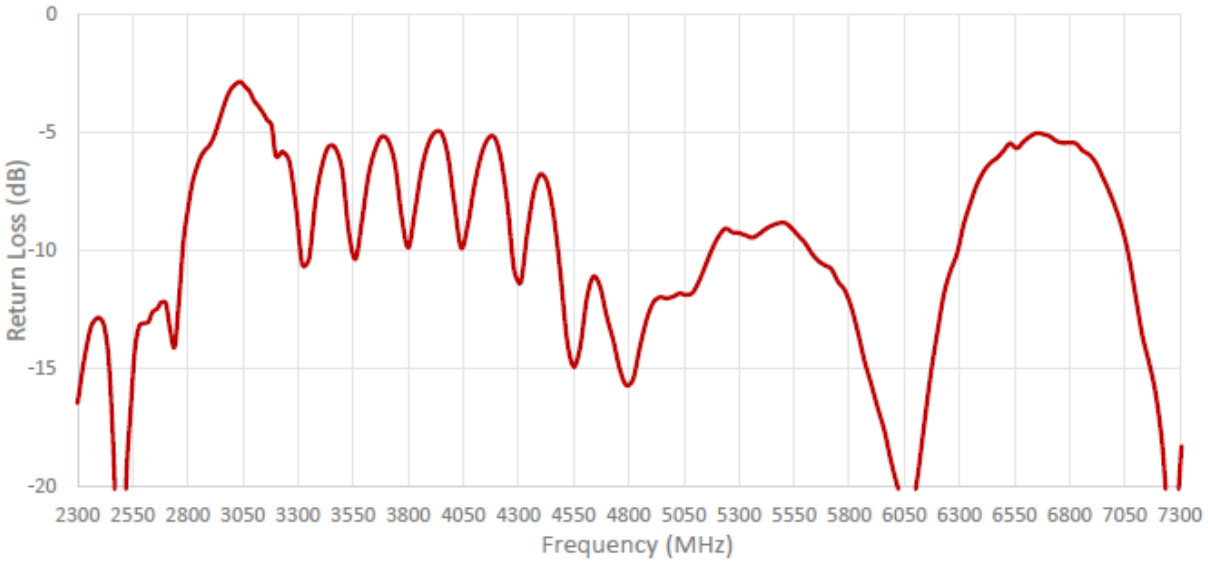
2. Mechanical and Environmental Specifications

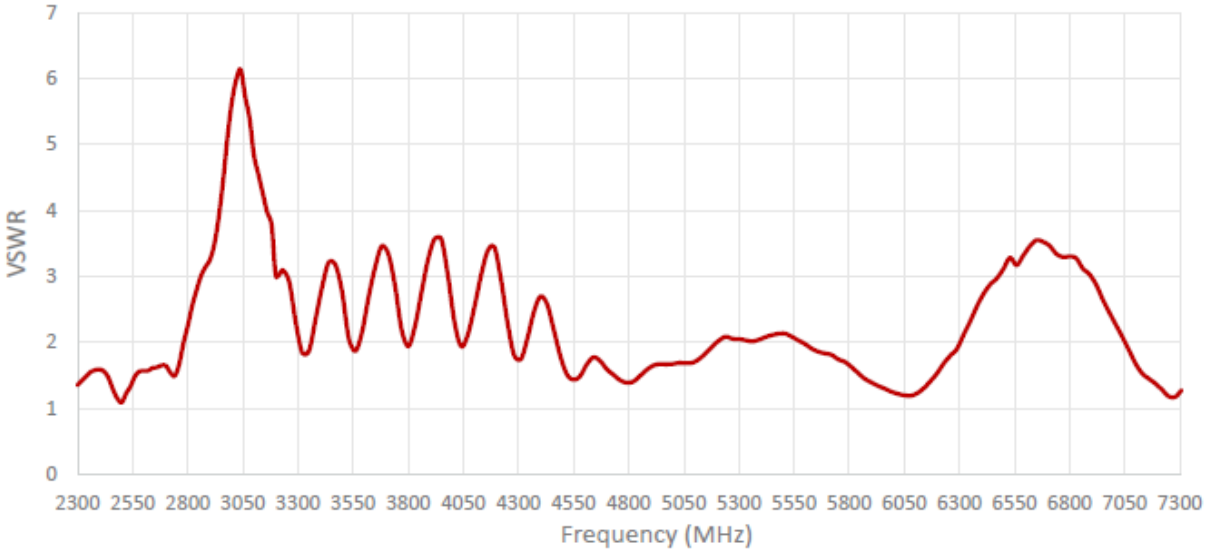
Mounting type	Connector mount
Dimensions (mm)	135 x 19 x 10
Radome	ABS UV stable
Radome color	Black
Connector feature	Hinged
Operating temperature (°C)	-40 to +85
Storage temperature (°C)	-40 to +85
Substance compliance	RoHS, REACH

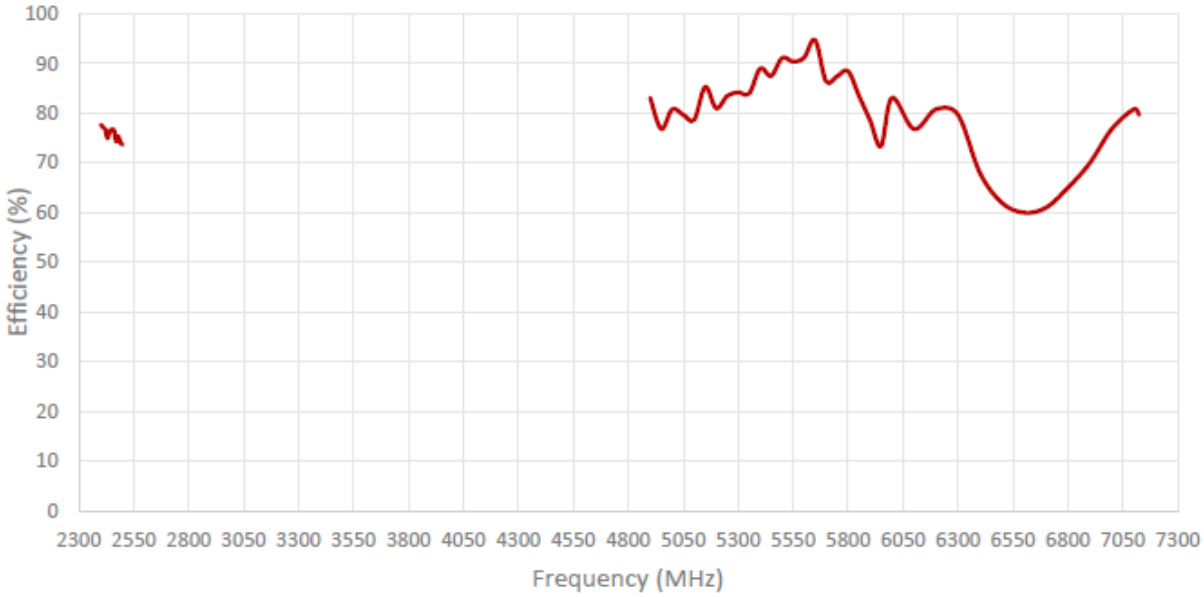


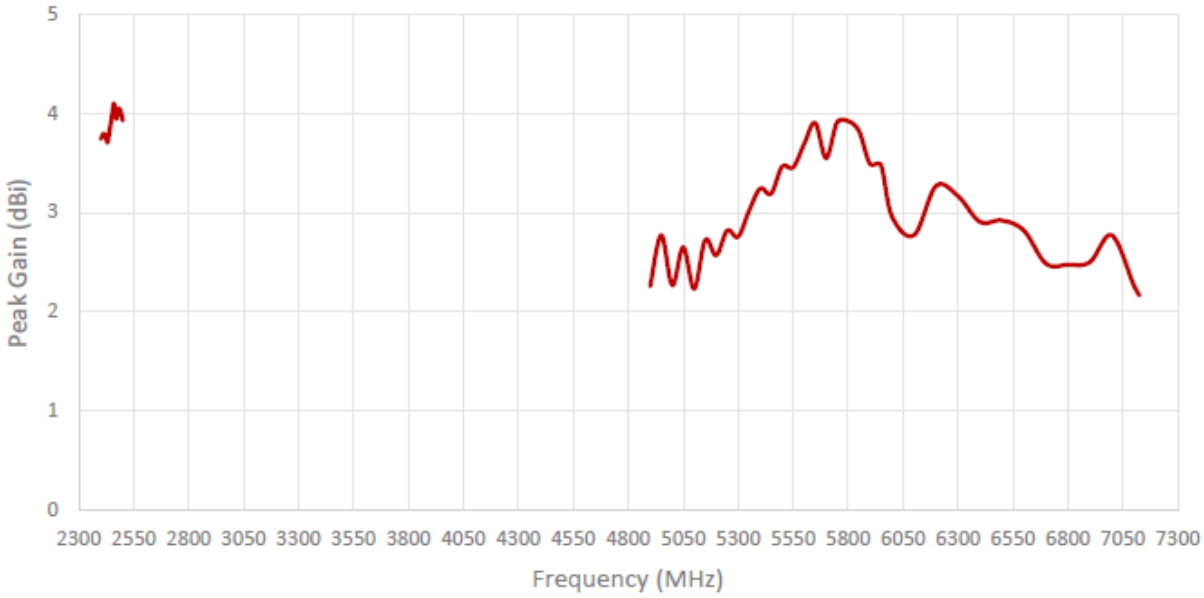


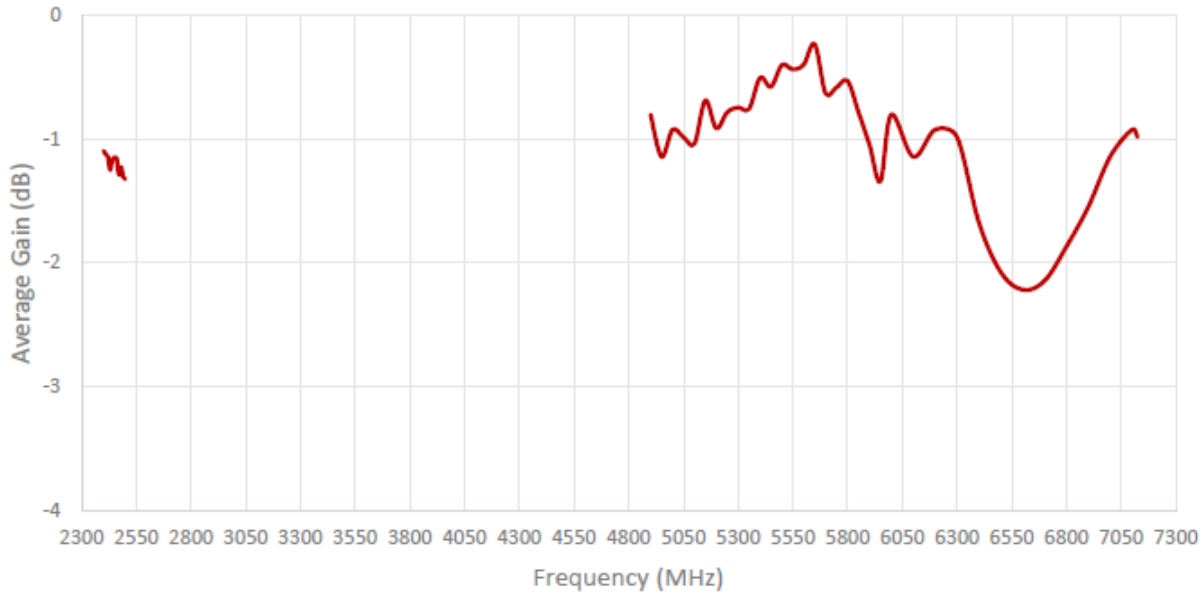
3. Antenna Parameters

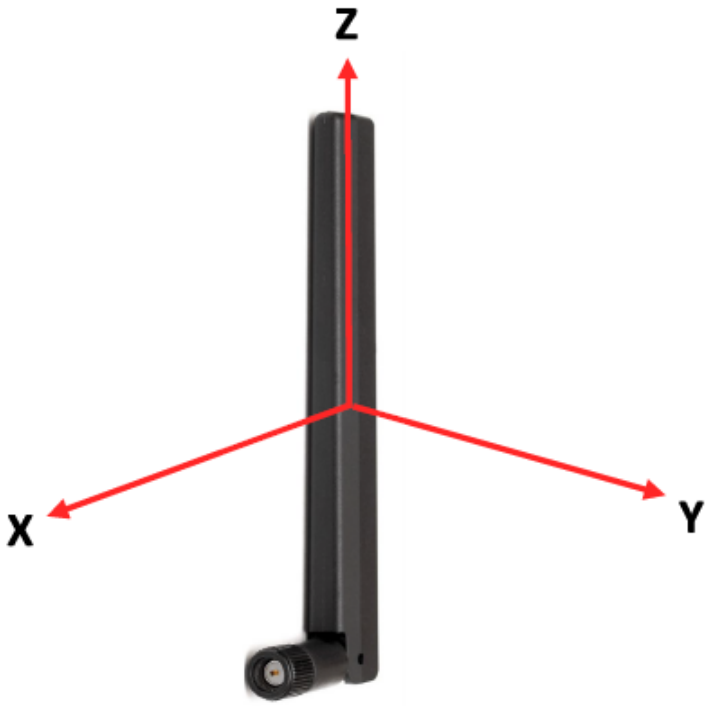




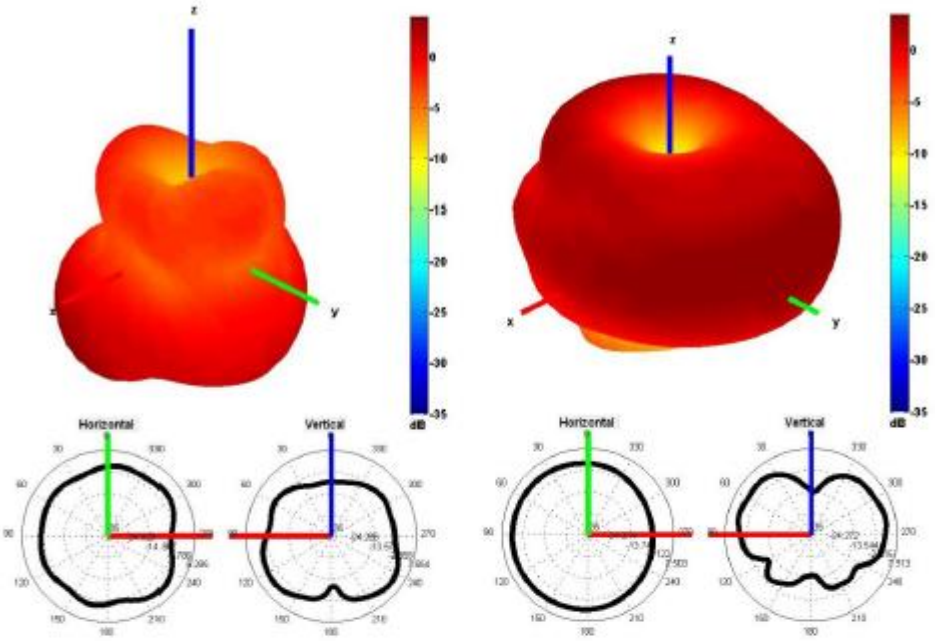

Efficiency (%)
100
90
80
70
60
50
40
30
20
10
0
2300 2550 2800 3050 3300 3550 3800 4050 4300 4550 4800 5050 5300 5550 5800 6050 6300 6550 6800 7050 7300
Frequency (MHz)


Peak Gain (dBi)
5
4
3
2
1
0
2300 2550 2800 3050 3300 3550 3800 4050 4300 4550 4800 5050 5300 5550 5800 6050 6300 6550 6800 7050 7300
Frequency (MHz)

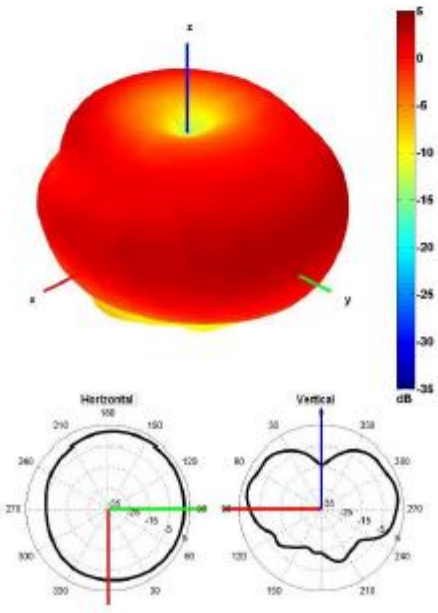




Radiation pattern reference



2450 and 5500 MHz Radiation pattern



6500 MHz Radiation pattern