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## **2J Phoenix 4G-5G Ultraband 2x2 MIMO + Dual-Band WiFi-6E 3-Port Combo Stud Antenna, 617 to 7125 MHz**

SKU  
ANT-2J-00019  
MPN  
2J6985BA

## Description

The 2J Phoenix 4G-5G Ultraband 2x2 MIMO + Dual-Band WiFi-6E 3-Port Combo Stud Antenna (SKU: ANT-2J-00019) is a versatile solution for automotive, marine, telematics, automation, and M2M applications. Manufactured by 2J, a globally recognised antenna supplier, this model operates within a wide frequency range of 617 to 7125 MHz, making it suitable for various telecommunication needs.

This compact antenna measures 80 x 74 x 25.6 mm and is constructed from durable polycarbonate and ASA plastic, ensuring robustness in harsh environments. It holds an IP67 ingress protection rating, making it dust-tight and water-resistant, and can function in temperatures from -40 °C to 85 °C. The antenna features three RF connection ports, supporting 2x2 MIMO configurations and dual-band WiFi-6E.

The antenna's RF performance is optimised across several frequency ranges. With a 50  $\Omega$  impedance and up to 25 W power support, each element is linear polarised. Key...

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## 2J

2J is a worldwide supplier of antenna solutions for Automotive, Marine, Telematic, Automation and M2M markets. 2J utilise a plethora of modern engineering tools, from network analysers and anechoic chambers, to simulation software and 3D printers. These tools help reduce design phases, and enable us to react to customers' needs promptly and efficiently.

Over the past decade, 2J has established ...

## RF Specification

### Cable 1: 5GNR

Start Frequency

617 MHz

Stop Frequency

5925 MHz

Max. Input Power

25 W

Polarisation

[Linear](#)

Input Impedance

50  $\Omega$

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
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1	<a href="#">SMA Male</a>	<a href="#">Straight</a>	<a href="#">L-100</a>	3000 mm
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Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
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617 MHz	960 MHz	3.1 dBi	> 15.5 dB	< 1.5:1 -4.6 dBi	35%
1427 MHz	2690 MHz	2.7 dBi	> 12.1 dB	< 1.8:1 -5.4 dBi	27%
3300 MHz	5000 MHz	0.9 dBi	> 12.3 dB	< 1.9:1 -6.5 dBi	24%
5150 MHz	5925 MHz	-0.4 dBi	> 13 dB	< 1.7:1 -6.5 dBi	22%

## Cable 2: 5GNR

Start Frequency

617 MHz

Stop Frequency

5925 MHz

Max. Input Power

25 W

Polarisation

[Linear](#)

Input Impedance

50 Ω

RF Connectors

**Ports RF Interface Body Shape Cable Series Length**

1 [SMA Male](#) [Straight](#) [L-100](#) 3000 mm

Frequency Test Data

**Start Freq. Stop Freq. Peak Gain Return Loss VSWR Avg. Gain Efficiency**

617 MHz	960 MHz	3.2 dBi	> 16.8 dB	< 1.4:1 -4.8 dBi	34%
1427 MHz	2690 MHz	2.9 dBi	> 12.8 dB	< 1.7:1 -5.7 dBi	27%
3300 MHz	5000 MHz	1.2 dBi	> 13.4 dB	< 1.7:1 -7.3 dBi	27%
5150 MHz	5925 MHz	0.4 dBi	> 13.1 dB	< 1.7:1 -6.6 dBi	22%

## Cable 3: WiFi

Start Frequency

2410 MHz

Stop Frequency

7125 MHz

Max. Input Power

25 W

Polarisation

[Linear](#)

Input Impedance

50 Ω

RF Connectors

Ports RF Interface Body Shape Cable Series Length

1 [SMA Male](#) [Straight](#) [L-100](#) 3000 mm

Frequency Test Data

Start Freq. Stop Freq. Peak Gain Return Loss VSWR Avg. Gain Efficiency

2410 MHz	2490 MHz	-0.2 dBi	> 11.4 dB	< 2:1	-6.1 dBi	25%
4920 MHz	5925 MHz	1.7 dBi	> 18 dB	< 1.3:1	-5.6 dBi	27%
5925 MHz	7125 MHz	1.6 dBi	> 18.5 dB	< 1.3:1	-5.8 dBi	25%

Physical Specification

Subtype

[Fin / Stud / Combo](#)

Input Ports

3

MIMO

[2x2 MIMO](#)

Min. Operating Temperature

-40 °C

Max. Operating Temperature

85 °C

Dimensions

80 x 74 x 25.6

Ingress Protection

[IP67](#)

Materials

[ASA Plastic](#), [Polycarbonate \(PC\)](#)

Mounting

[Stud / Bulkhead / Panel](#)

Compliance/Certifications

RoHS

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