

# 2J Phoenix 4G-5G WiFi Ultraband 2x2 MIMO Stud Antenna, 617 to 5925 MHz

SKU: ANT-2J-00017

MPN: 2J6983BA

## Description

The 2J Phoenix 4G-5G WiFi Ultraband 2x2 MIMO Stud Antenna (SKU: ANT-2J-00017, Part Number: 2J6983BA) offers robust wireless connectivity across frequencies from 617 to 5925 MHz. This IP67-rated antenna ensures reliable performance in harsh conditions, with an operating temperature range from -40 °C to 85 °C. Designed for versatility, this Fin/Stud/Combo antenna supports 2x2 MIMO technology, enhancing data throughput and signal quality through its dual RF connections.

Each antenna element features a 50 Ω impedance and can handle up to 25 W input power. Linear polarisation facilitates consistent signal reception, making it ideal for applications in automotive, marine, telematics, and M2M markets. The antenna's RF performance across various frequency bands is characterised by peak gains ranging from 2.0 dBi to 5.1 dBi and VSWR values under 3.3:1, ensuring efficient energy transmission.

Connectivity is achieved via dual SMA Male interfaces...

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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	Polarisation:	Linear
Stop Frequency:	5925 MHz	Input Impedance:	50
Max. Input Power:	25 W		

## RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	L-100	300 mm

## Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
617 MHz	960 MHz	2.1 dBi	> 11.2 dB	< 2.1	-3.5 dBi	46%
1427 MHz	2690 MHz	2.1 dBi	> 8.3 dB	< 2.6:1	-3.1 dBi	51%
3300 MHz	5000 MHz	3.8 dBi	> 7.1 dB	< 3.2:1	-5.1 dBi	33%
5150 MHz	5925 MHz	3.9 dBi	> 7.4 dB	< 2.6:1	-5.2 dBi	31%

## Cable 2: 5GNR

Start Frequency:	617 MHz	Polarisation:	Linear
Stop Frequency:	5925 MHz	Input Impedance:	50
Max. Input Power:	25 W		

## RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	L-100	300 mm

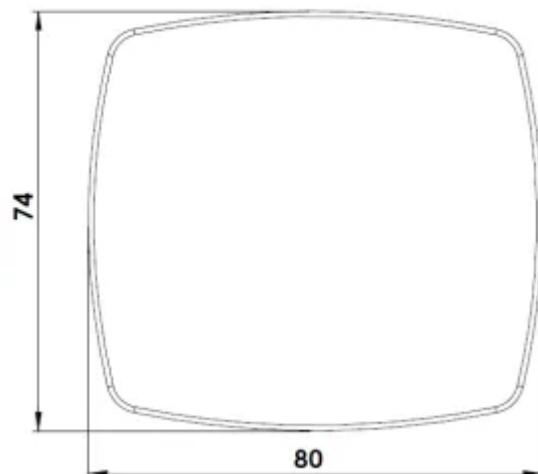
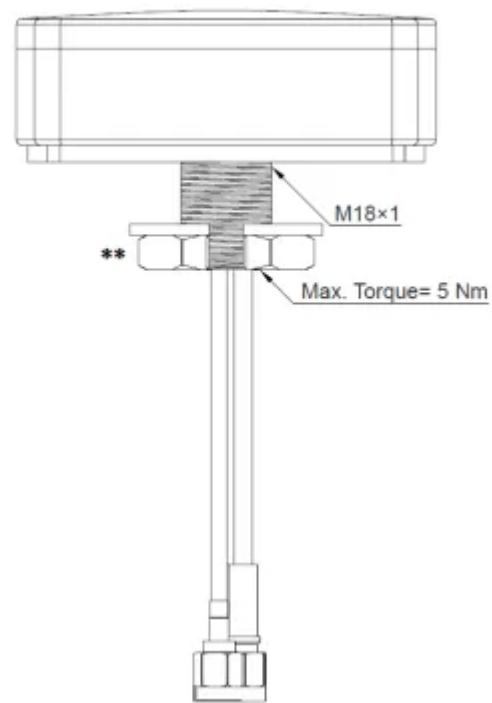
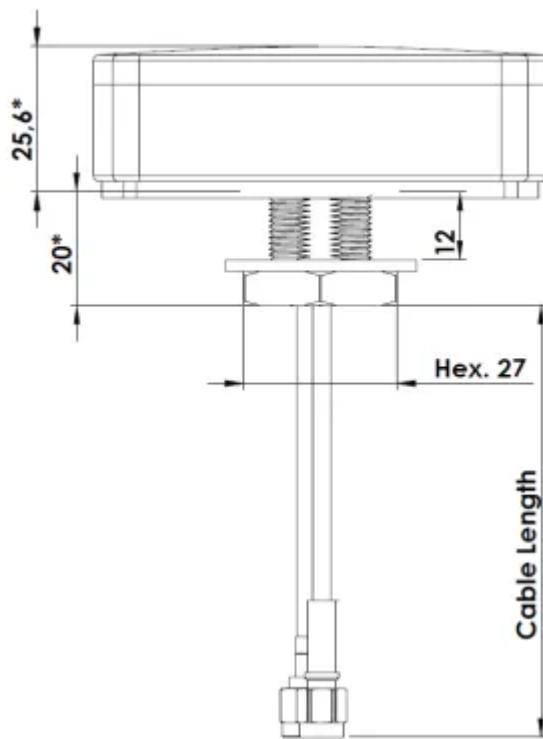
## Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
617 MHz	960 MHz	3.2 dBi	> 9.6 dB	< 2.1:1	-3.7 dBi	45%
1427 MHz	2690 MHz	2 dBi	> 8.2 dB	< 2.6:1	-3 dBi	52%
3300 MHz	5000 MHz	5.1 dBi	> 6.9 dB	< 3.3:1	-4.3 dBi	40%
5150 MHz	5925 MHz	4.7 dBi	> 7 dB	< 2.8:1	-4.9 dBi	34%

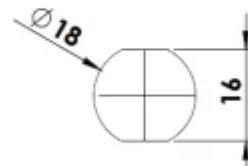
# Physical Specification

Subtype:	Fin / Stud / Combo	Dimensions:	80 x 74 x 25.6
Input Ports:	2	Ingress Protection:	IP67
MIMO:	2x2 MIMO	Compliance/Certifications:	RoHS
Min. Operating Temperature:	-40 °C		
Max. Operating Temperature:	85 °C		

# Drawing



**Mounting hole**



Max. mounting thickness 12mm  
Note: Dimensions are in millimeters  
\*Dimensions are after mounting  
\*\*Max. Torque= 5 Nm

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