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2J 4G-5G WiFi Ultraband 4x4 MIMO Stud Antenna, 617 to 5925 MHz

SKU
ANT-2J-00021
MPN
2J7183BC

Description

The 2J 4G-5G WiFi Ultraband 4x4 MIMO Stud Antenna (SKU: ANT-2J-00021) is a versatile, high-performance solution designed for a wide frequency range from 617 to 5925 MHz. Featuring a compact design of 96 x 130 mm, it is ideal for diverse applications in sectors such as automotive, marine, telematics, automation, and M2M systems. This antenna offers four RF connections, providing robust 4x4 MIMO capabilities, and is equipped with IP67 ingress protection, ensuring reliable operation in challenging environments.

Engineered by 2J, a leader in antenna solutions based in Slovakia, this antenna is compliant with ISO 9001 and RoHS standards, attesting to its high-quality manufacturing. With a 50 Ω impedance and linear polarisation, each antenna element supports up to 35 W of input power. Its SMA Male interfaces and 3000 mm L-195 cables ensure easy integration into existing systems.

The antenna's RF performance, optimised across multiple frequency...

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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
35 W
Polarisation
Linear
Input Impedance
50 Ω
RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	L-195	3000 mm

Frequency Test Data

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

617 MHz	960 MHz	1.3 dBi	> 5.5 dB	< 3.7:1	-5.1 dBi	31%
1427 MHz	2690 MHz	3.4 dBi	> 12.2 dB	< 2:1	-3.9 dBi	42%
3300 MHz	5000 MHz	4.7 dBi	> 15.2 dB	< 1.5:1	-3.8 dBi	42%
5150 MHz	5925 MHz	4 dBi	> 14.2 dB	< 1.6:1	-4.4 dBi	37%

Cable 2: 5GNR

Start Frequency
617 MHz
Stop Frequency
5925 MHz
Max. Input Power
35 W
Polarisation
Linear
Input Impedance
50 Ω
RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	L-195	3000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
617 MHz	960 MHz	1.2 dBi	> 5.6 dB	< 3.7:1	-5.1 dBi	31%
1427 MHz	2690 MHz	3.6 dBi	> 12.7 dB	< 1.9:1	-3.9 dBi	41%
3300 MHz	5000 MHz	4.6 dBi	> 15.3 dB	< 1.5:1	-3.8 dBi	42%
5150 MHz	5925 MHz	3.2 dBi	> 16 dB	< 1.5:1	-4.8 dBi	33%

Cable 3: 5GNR

Start Frequency
617 MHz
Stop Frequency
5925 MHz
Max. Input Power
35 W
Polarisation
Linear
Input Impedance
50 Ω

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	L-195	3000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
617 MHz	960 MHz	1.3 dBi	> 5.4 dB	< 3.7:1	-5 dBi	32%
1427 MHz	2690 MHz	3.8 dBi	> 12.9 dB	< 1.8:1	-3.8 dBi	42%
3300 MHz	5000 MHz	4.5 dBi	> 16.7 dB	< 1.4:1	-4 dBi	40%
5150 MHz	5925 MHz	4.6 dBi	> 12.4 dB	< 1.8:1	-4.2 dBi	39%

Cable 4: 5GNR

Start Frequency
617 MHz
Stop Frequency
5925 MHz
Max. Input Power
35 W
Polarisation
Linear
Input Impedance
50 Ω
RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	L-195	3000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Avg. Gain	Efficiency
617 MHz	960 MHz	1.6 dBi	> 5.7 dB	< 3.5:1	-5.1 dBi	31%
1427 MHz	2690 MHz	3.4 dBi	> 12.8 dB	< 1.8:1	-3.9 dBi	42%
3300 MHz	5000 MHz	4.6 dBi	> 16.8 dB	< 1.5:1	-3.8 dBi	43%
5150 MHz	5925 MHz	3.9 dBi	> 15.4 dB	< 1.5:1	-4.6 dBi	35%

Physical Specification

Subtype
Fin / Stud / Combo
Input Ports
4

MIMO
4x4 MIMO
Min. Operating Temperature
-40 °C
Max. Operating Temperature
85 °C
Dimensions
96 x 130
Ingress Protection
IP67
Materials
ASA Plastic
Mounting
Stud / Bulkhead / Panel
Compliance/Certifications
ISO 9001 Quality Management
,
RoHS

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