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2J Phoenix 4G-5G Ultraband MIMO + Dual-Band WiFi-6E + GNSS 4-Port Combo Stud Antenna, 617 to 7125 MHz (3m cable)

SKU
ANT-2J-00020
MPN
2J6986BGFC 3M

Description

The 2J Phoenix 4G-5G Ultraband MIMO + Dual-Band WiFi-6E + GNSS 4-Port Combo Stud Antenna (SKU: ANT-2J-00020) offers a comprehensive solution for high-performance connectivity. With an operating frequency range from 617 to 7125 MHz and an IP67-rated robust design, this antenna is ideal for demanding environments, including automotive, marine, and M2M applications.

This antenna features four ports: two dedicated to 4G/5G MIMO, one for WiFi-6E, and one for GNSS. The 4G/5G MIMO supports frequencies from 617 to 5925 MHz with linear polarisation and a maximum input power of 25 W, ensuring optimal connectivity across multiple bands. The Dual-Band WiFi-6E operates from 2410 to 7125 MHz, enhancing wireless communication with its broad frequency support.

The integrated GNSS element, featuring an active LNA with a gain of 28 dBic, ensures precise location tracking, making it suitable for navigation systems. Each port is equipped with an SMA Male...

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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: CELLULAR/LTE

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	A-302	3000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Azimuth	Avg. Gain	Efficiency
617 MHz	960 MHz	3.1 dBi	> 15.5 dB	< 1.5:1	360°	-4.6 dBi	35%
1427 MHz	2690 MHz	2.7 dBi	> 12.1 dB	< 1.8:1	360°	-5.4 dBi	27%
3300 MHz	5000 MHz	0.9 dBi	> 12.3 dB	< 1.9:1	360°	-6.5 dBi	24%
5150 MHz	5925 MHz	0.4 dBi	> 13 dB	< 1.7:1	360°	-6.5 dBi	22%

Cable 2: CELLULAR/LTE

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	A-302	3000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Azimuth	Avg. Gain	Efficiency
617 MHz	960 MHz	3.2 dBi	> 16.8 dB	< 1.4:1	360°	-4.8 dBi	34%
1427 MHz	2690 MHz	2.9 dBi	> 12.8 dB	< 1.7:1	360°	-5.7 dBi	27%
3300 MHz	5000 MHz	1.2 dBi	> 13.4 dB	< 1.7:1	360°	-7.3 dBi	20%
5150 MHz	5925 MHz	0.4 dBi	> 13.1 dB	< 1.7:1	360°	-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	A-302	3000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Azimuth	Avg. Gain	Efficiency
2410 MHz	2490 MHz	0.2 dBi	> 11.4 dB	< 2:1	360°	-6.1 dBi	25%
4920 MHz	5925 MHz	1.7 dBi	> 18 dB	< 1.3:1	360°	-5.6 dBi	27%
5925 MHz	7125 MHz	1.6 dBi	> 18.5 dB	< 1.3:1	360°	-5.8 dBi	25%

Cable 4: GNSS

Gain (Zenith)
-3.6 dBic
Start Frequency
1575.42 MHz
Stop Frequency
1606 MHz
Input Impedance
50 Ω
Polarisation
Right Hand Circular (RHCP)

Low Noise Amplifier (LNA)

LNA Gain
28 dBic
Noise Figure
≤ 1.8 dB
Power Consumption
< 24.3 mW
Min. Operating Voltage
1.5 V
Max. Operating Voltage
3.6 V
RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	L-100	3000 mm

Physical Specification

Subtype
Fin / Stud / Combo
Input Ports
4
MIMO
4x4 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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