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

SKU ANT-2J-00026 MPN 2J7B84BGFC

Description

The 2J 4G-5G WiFi Ultraband 4x4 MIMO + GNSS 5-Port Combo Stud Antenna (SKU: ANT-2J-00026) is a versatile solution designed for diverse applications, including automotive, marine, and telematics. With its capability to operate across a broad frequency range of 617 to 5925 MHz, it supports 4x4 MIMO configurations, enhancing data throughput and connectivity reliability.

Constructed from durable ASA plastic, this antenna is IP67 rated, ensuring robust performance in challenging environments, withstanding temperatures from -40 °C to 85 °C. Its five RF connections include four SMA Male interfaces for 5GNR, each supporting up to 35 W input power with linear polarisation, and one dedicated GNSS port for GPS/GLONASS/QZSS/Galileo. The GNSS port features an active LNA with 24 dBic gain, ensuring precise location tracking.

2J, based in Slovakia, is renowned for its innovative antenna solutions, leveraging advanced engineering tools to meet customer...

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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	> -5.6 dB	< 3.5:1 -5 dBi	-32%
1427 MHz	2690 MHz	-3.4 dBi	> -11.7 dB	< 1.9:1 -3.9 dBi	-41%
3300 MHz	5000 MHz	-4.8 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	> -6.2 dB	< 3.2:1 -5 dBi	-32%
1427 MHz	2690 MHz	-3.5 dBi	> -12.5 dB	< 1.9:1 -3.9 dBi	-41%
3300 MHz	5000 MHz	-4.6 dBi	> -15.1 dB	< 1.5:1 -3.7 dBi	-43%
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 $> 5.6 \, dB$ < 3.7:1 -5 dBi 32% > 12.8 dB 42% 1427 MHz 2690 MHz 3.8 dBi < 1.8:1 -3.8 dBi 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

<u>Linear</u>

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	1.7 dBi	> 5.9 dB	< 3.3:1 -5.1 dBi	31%
1427 MHz	2690 MHz	3.4 dBi	> 12.7 dB	< 1.8:1 -3.8 dBi	42%
3300 MHz	5000 MHz	4.6 dBi	> 16.8 dB	< 1.5:1 -3.7 dBi	43%
5150 MHz	5925 MHz	3.9 dBi	> 15.4 dB	< 1.5:1 -4.6 dBi	35%

Cable 5: GPS/GLONASS/QZSS/Galileo

Start Frequency 1575.42 MHz Stop Frequency 1610 MHz Input Impedance $50~\Omega$ Polarisation Right Hand Circular (RHCP)

Low Noise Amplifier (LNA)

LNA Gain

24 dBic

Noise Figure

≤ 1.2 dB

Power Consumption

< 137.5 mW

Min. Operating Voltage

2.7 V

Max. Operating Voltage

5.5 V

RF Connectors

Ports RF Interface Body Shape Cable Series Length

1 <u>SMA Male</u> <u>Straight</u> <u>L-100</u> 3000 mm

Physical Specification

Subtype

Fin / Stud / Combo

Input Ports

5

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
RoHS

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