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Powertec Wireless Technology ABN: 42 082 948 463 PO Box 1034, Ashmore City Queensland, Australia, 4214 sales@powertec.com.au 1300 769 378

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								
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 <u>SMA Ma</u>	le	<u>Straight</u>	<u>L-100</u>	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 Freque	ency							
617 MHz								
Stop Freque	ency							
5925 MHz								
Max. Input Power								
25 W								
Polarisation								
Linear								
Input Impedance								
50 Ω								
RF Connectors								
Ports RF Interface Body Shape Cable Series Length								
1 <u>SMA</u>	Male Str	aight	<u>L-100</u>	300 mm				
Frequency Test Data								
Start Freq	. Stop Freq	. Peak G	ain Return Lo	ss VSWR Avg. Gai	n 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 Input Ports 2 MIMO 2x2 MIMO Min. Operating Temperature -40 °C Max. Operating Temperature 85 °C Dimensions 80 x 74 x 25.6 Ingress Protection <u>IP67</u> Compliance/Certifications RoHS

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