

2J Sparrow 4G-5G WiFi Ultraband + GNSS 2-Port Combo Adhesive Antenna, 617 to 5925 MHz

SKU: ANT-2J-00008
MPN: 2J4884PGF

Description

The 2J Sparrow 4G-5G WiFi Ultraband + GNSS 2-Port Combo Adhesive Antenna (SKU: ANT-2J-00008, Part No: 2J4884PGF) offers robust connectivity and precision for diverse applications. This adhesive patch antenna measures 83 x 35 x 13.3 mm and is constructed from durable ABS plastic. It boasts an IP67 ingress protection rating, making it suitable for harsh environments with an operational temperature range of -40 °C to 85 °C. The antenna is RoHS compliant, ensuring adherence to environmental regulations.

Featuring two ports, the antenna supports both 4G-5G cellular and GNSS functionalities. The 5G NR element covers frequencies from 617 to 5925 MHz with a 50 Ω impedance, supporting up to 25 W of input power. It offers a peak gain of 3.3 dBi at lower bands (617-960 MHz) and a linear polarisation with a 360° azimuth beamwidth. The GNSS element operates within 1575 to 1606 MHz using RHCP polarisation and includes an active LNA with 28 dBc gain...

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RF Specification

Cable 1: 5G NR



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 ...

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	3000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Return Loss	VSWR	Azimuth	Avg. Gain	Efficiency
617 MHz	960 MHz	3.3 dBi	> 12.4 dB	< 2.1:1	360°	-2.9 dBi	52%
1427 MHz	2690 MHz	2 dBi	> 14 dB	< 1.6:1	360°	-3.6 dBi	45%
3300 MHz	5000 MHz	0.5 dBi	> 13 dB	< 1.7:1	360°	-5.2 dBi	31%
5150 MHz	5925 MHz	0.6 dBi	> 16.2 dB	< 1.5:1	360°	-5.7 dBi	27%

Cable 2: GPS/GLONASS/QZSS/Galileo

Start Frequency:	1575.42 MHz	Input Impedance:	50
Stop Frequency:	1606 MHz	Polarisation:	Right Hand Circular (RHCP)

Low Noise Amplifier (LNA)

LNA Gain:	28 dBic	Min. Operating Voltage:	1.5 V
Noise Figure:	≤ 1.5 dB	Max. Operating Voltage:	3.6 V

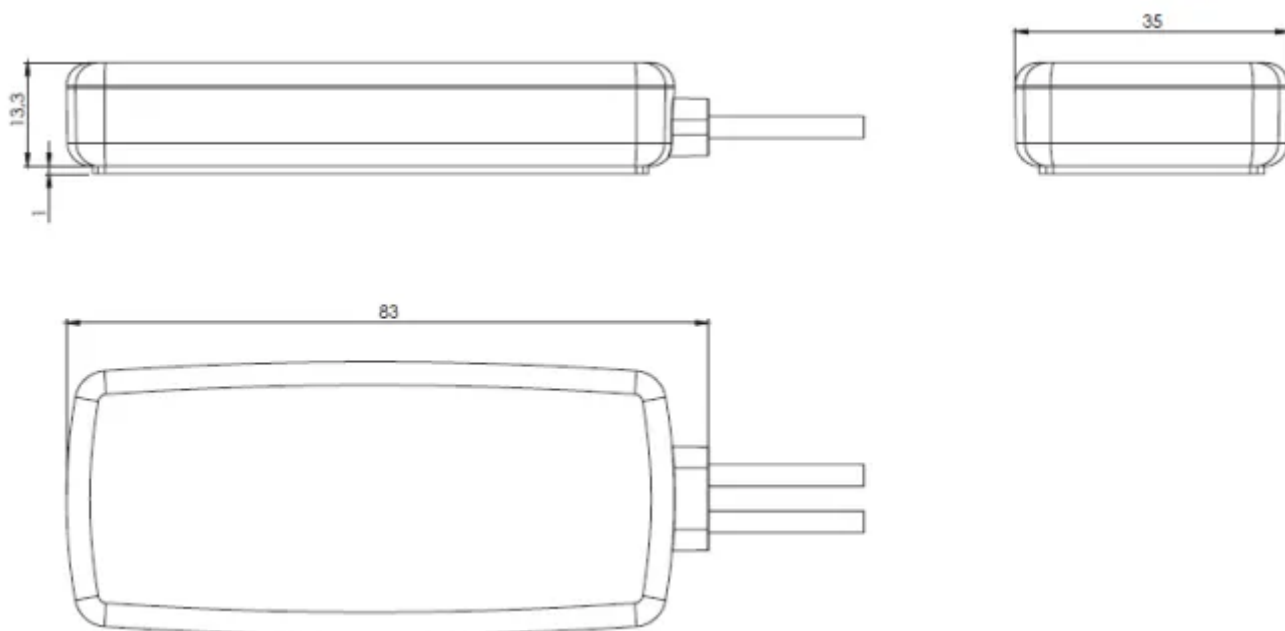
RF Connectors

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

Physical Specification

Subtype:	Adhesive Patch	Dimensions:	83 x 35 x 13.3
Input Ports:	2	Ingress Protection:	IP67
MIMO:	1x1 SISO	Materials:	ABS Plastic
Min. Operating Temperature:	-40 °C	Compliance/Certifications:	RoHS
Max. Operating Temperature:	85 °C		

Drawing



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