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2J Falcon 4G-5G WiFi Ultraband MIMO + GNSS Adhesive Antenna, 617 to 5925 MHz

SKU
ANT-2J-00013
MPN
2J6084PGFA

Description

The 2J Falcon 4G-5G WiFi Ultraband MIMO + GNSS Adhesive Antenna (ANT-2J-00013) is a versatile solution designed for high-performance connectivity across a broad frequency range of 617 to 5925 MHz. This adhesive patch antenna integrates seamlessly into automotive, M2M, base station, and embedded systems, offering reliable multi-band support essential for modern telecommunication applications.

Key features include a robust 2x2 MIMO configuration with three RF connections, ensuring optimal data throughput and signal reliability. It operates efficiently in challenging environments, with a temperature range from -40 °C to 85 °C. The antenna's GNSS functionality, enhanced by an integrated LNA, provides precise navigation support, making it ideal for applications requiring accurate location tracking.

The Falcon antenna is RoHS compliant, ensuring adherence to environmental standards. Its compact dimensions (80 x 76 x 16 mm) and adhesive mounting...

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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
25 W
Polarisation
Linear
Input Impedance
50 Ω
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	2.4 dBi	> 6.9 dB	< 3.4:1	360°	-3.9 dBi	43%
1427 MHz	2690 MHz	4.4 dBi	> 13.5 dB	< 1.7:1		-2.3 dBi	59%
3300 MHz	5000 MHz	2 dBi	> 9.1 dB	< 2.3:1	360°	-4.3 dBi	38%
5150 MHz	5925 MHz	1.1 dBi	> 7.2 dB	< 2.6:1	360°	-5 dBi	32%

Cable 2: 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	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	1.9 dBi	> 6.1 dB	< 3.5:1		-3.7 dBi	44%
1427 MHz	2690 MHz	4.7 dBi	> 15.5 dB	< 1.6:1		-2 dBi	64%
3300 MHz	5000 MHz	1.9 dBi	> 9.2 dB	< 2.3:1	360°	-4.4 dBi	37%
5150 MHz	5925 MHz	1.4 dBi	> 8 dB	< 2.3:1	360°	-5.1 dBi	31%

Cable 3: GNSS

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

Low Noise Amplifier (LNA)

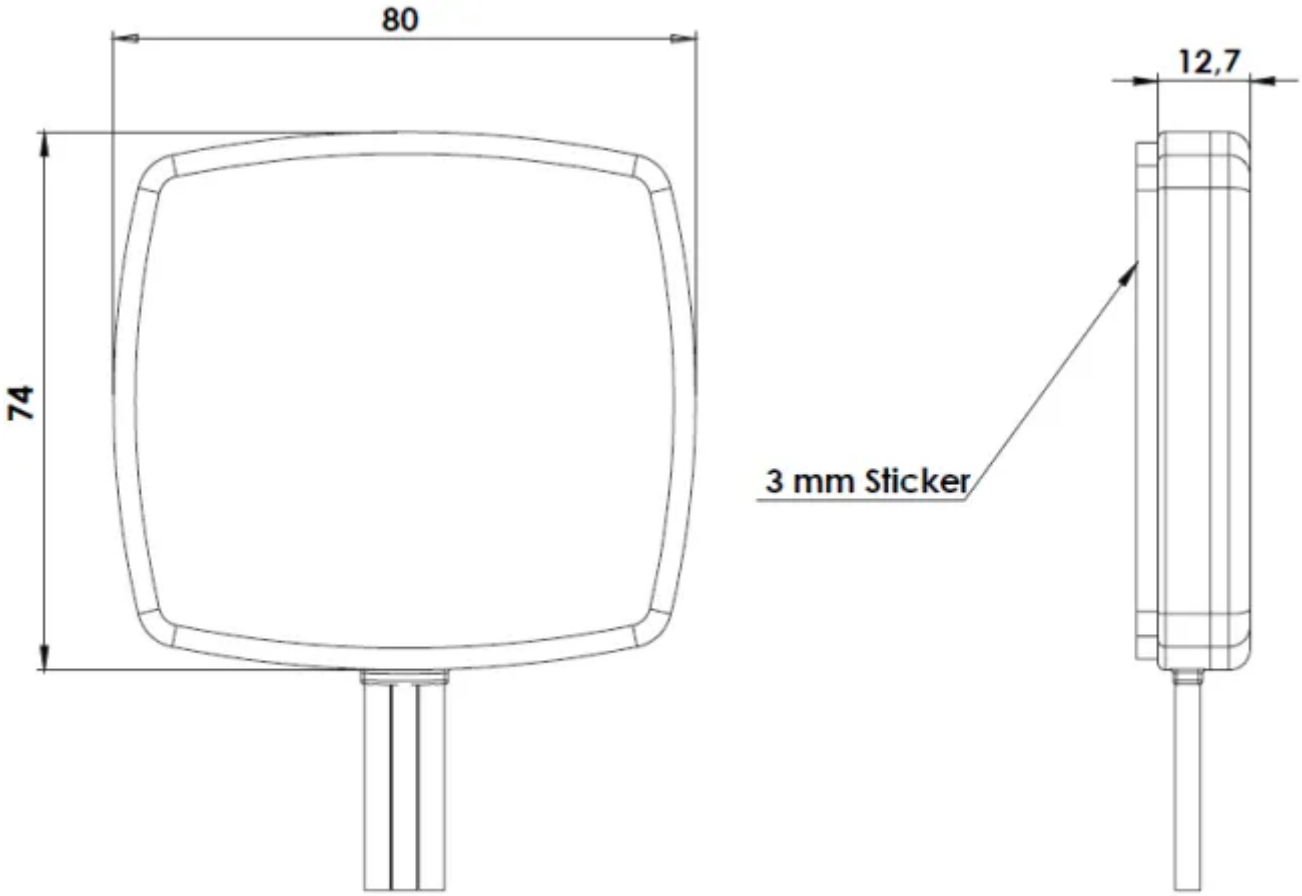
LNA Gain
28 dBic
Noise Figure
≤ 1.5 dB
Power Consumption
< 24.3 mW
Min. Operating Voltage
1.5 V
Max. Operating Voltage
3.6 V
RF Connectors

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

Physical Specification

Subtype
Adhesive Patch
Input Ports
3
MIMO
2x2 MIMO
Min. Operating Temperature
-40 °C
Max. Operating Temperature
85 °C

Dimensions
80 x 76 x 16
Materials
ABS Plastic
Mounting
Adhesive
Compliance/Certifications
RoHS
Drawing



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