

# 2J 868-915 MHz LPWAN Flexible Embedded Adhesive Antenna, 863 to 928 MHz

SKU: ANT-2J-00029

MPN: 2JF0415P

## Description

The 2J 868-915 MHz LPWAN Flexible Embedded Adhesive Antenna (SKU: ANT-2J-00029) is a versatile PCB/surface mount antenna designed for robust performance across the 863 to 928 MHz frequency range. With its compact dimensions of 25 x 70 x 0.2 mm, this antenna is an ideal solution for space-constrained applications. Its construction allows for operation in extreme temperatures from -40 °C to 85 °C, making it suitable for diverse environments.

This antenna features a single input port with a U.FL female interface connected via a 100 mm mini-coax cable, ensuring reliable connectivity. It supports up to 25 W of input power and maintains a 50 Ω impedance, offering linear polarisation for enhanced signal integrity. The antenna performs efficiently with a peak gain of 2.7 dBi and 3.6 dBi across different frequency ranges, achieving radiated efficiency of up to 77%.

Engineered by 2J, a leader in antenna solutions, this product is RoHS compliant and...

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# RF Specification

## Cable 1: 868/915 MHz ISM

|                   |         |                  |        |
|-------------------|---------|------------------|--------|
| Start Frequency:  | 863 MHz | Polarisation:    | Linear |
| Stop Frequency:   | 928 MHz | Input Impedance: | 50     |
| Max. Input Power: | 25 W    |                  |        |

## RF Connectors

| Ports | RF Interface | Body Shape | Cable Series      | Length |
|-------|--------------|------------|-------------------|--------|
| 1     | U.FL Female  | Straight   | 1.37 mm Mini-Coax | 100 mm |

## Frequency Test Data

| Start Freq. | Stop Freq. | Peak Gain | Return Loss | VSWR    | Azimuth | Avg. Gain | Efficiency |
|-------------|------------|-----------|-------------|---------|---------|-----------|------------|
| 863 MHz     | 870 MHz    | 2.7 dBi   | > 8 dB      | < 2.3:1 | 360°    | -2.3 dBi  | 58%        |
| 902 MHz     | 928 MHz    | 3.6 dBi   | > 21 dB     | < 1.2:1 | 360°    | -1.1 dBi  | 77%        |

# Physical Specification

|                             |                     |                            |               |
|-----------------------------|---------------------|----------------------------|---------------|
| Subtype:                    | PCB / Surface Mount | Dimensions:                | 25 x 70 x 0.2 |
| Input Ports:                | 1                   | Materials:                 | Plastic       |
| MIMO:                       | 1x1 SISO            | Mounting:                  | Adhesive      |
| Min. Operating Temperature: | -40 °C              | Compliance/Certifications: | RoHS          |
| Max. Operating Temperature: | 85 °C               |                            |               |

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