



DATA SHEET · PRODUCTS & SERVICES

Chip antenna for Zigbee, RFID and ISM 868/900



Fractus specialises in enabling effective mobile communications. Using Fractus technology, we design and manufacture optimised antennas to make your wireless devices more competitive. Our mission is to help our clients develop innovative products and accelerate their time to market through our expertise in antenna design, testing and manufacturing.

EZConnect™ Zigbee™ Chip Antenna

P/N: FR05-S1-R-0-105

The Fractus EZConnect Zigbee Chip Antenna is a compact rectangular antenna suitable for smart home, security and other industrial devices using the 915 MHz ISM band, where low power consumption and cost are top of mind. Taking advantage of the space-filling properties, this compact monopole antenna is ideal for use within indoor (highly scattered) as well as outdoor environments.

The Fractus EZConnect Zigbee Chip Antenna speeds your time to market by allowing you to easily integrate it within your industrial design (SMD mounting).

18.0 mm x 7.3 mm x 0.8 mm (image larger than actual size)



TOP



BOTTOM

PAT. US 7,148,850, US 7,202,822

Product Benefits

■ Small form factor

Allows integration into space limited areas easily and effectively.

■ Broad bandwidth

Ensures robust performance in different PCB dimensions and plastic housing, without the need for a matching network.

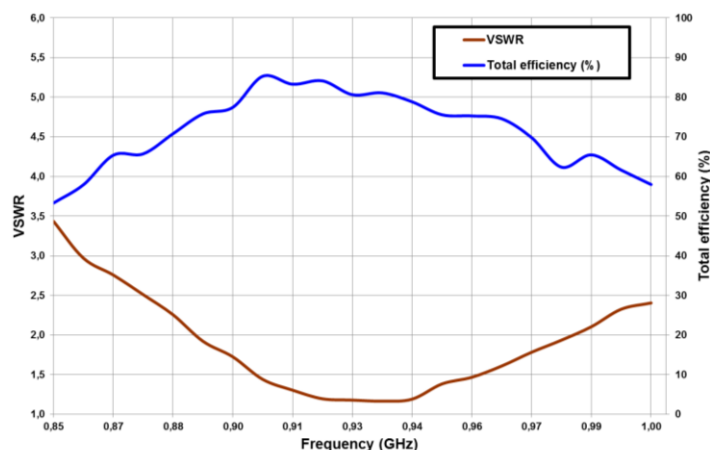
■ High performance

Optimises power consumption and increases device range.

■ Omnidirectional pattern

Increases device robustness due to a uniform radiation pattern.

VSWR and Total Efficiency (%) for 900 MHz band



900 MHz Technical features

Frequency range	902-928 MHz
Average Efficiency	82.0 %
Peak Gain	1.7 dB
Radiation Pattern	Omnidirectional
VSWR	< 2:1
Polarization	Linear
Weight	0.2 g
Temperature	-40 to + 85°C
Impedance	50 Ω
Dimensions (L x W x H)	18.0 mm x 7.3 mm x 0.8 mm

Measures from the evaluation board (121.0 mm x 48.0 mm x 0.8 mm PCB)

For additional information, please download the user manual from <http://www.fractus.com/index.php/fractus/documentation> or contact info@fractus.com.



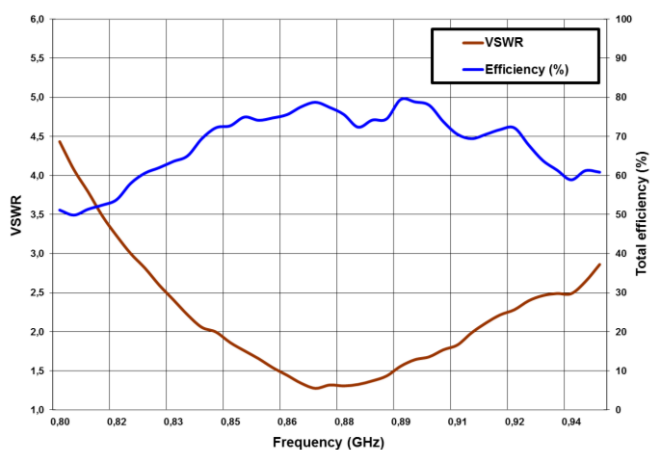
fractus
Optimised Antennas
for Wireless Devices

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VSWR and Total Efficiency (%) for 868 MHz band



868 MHz Technical features	
Frequency	868 MHz
Radiation Efficiency	78.1 %
Peak Gain	2.3 dB
Radiation Pattern	Omnidirectional
VSWR	< 2:1
Polarization	Linear
Weight (approx.)	0.2 g
Temperature	-40 to + 85 °C
Impedance	50 Ω
Dimensions (L x W x H)	18.0 mm x 7.3 mm x 0.8 mm

Measures from the evaluation board (121.0 mm x 48.0 mm x 0.8 mm PCB)