



# fractus

Optimised Antennas  
for Wireless Devices

DATA SHEET · PRODUCTS & SERVICES

## Small SMD chip antenna for low consumption, small form-factor Zigbee™ devices



Fractus specialises in enabling effective mobile communications. Using fractal 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.

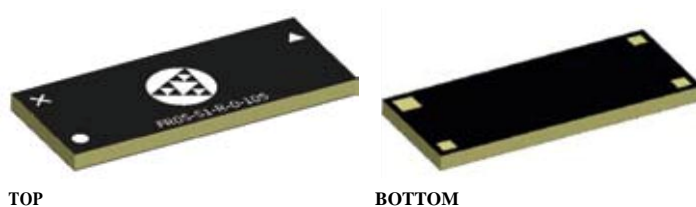
### Fractus® EZConnect™ Zigbee™ Chip Antenna

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

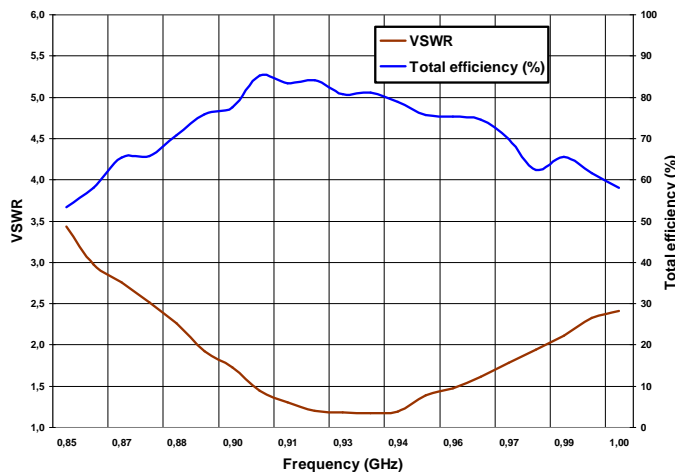
The Fractus EZConnect Zigbee Chip Antenna is a compact rectangular antenna suitable for smart home, security and other industrial devices using the 915 MHz ISM band, where low power consumption and cost are top of mind. Taking advantage of the space-filling properties of fractals, this compact monopole 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 mm x 7.3 mm x 0.8 mm (image larger than actual size)



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.

Technical features	
<b>Frequency range</b>	902-928 MHz
<b>Average Efficiency</b>	82 %
<b>Peak Gain</b>	1.67 dB
<b>Radiation Pattern</b>	Omnidirectional
<b>VSWR</b>	< 2:1
<b>Polarization</b>	Linear
<b>Weight</b>	0.2 g
<b>Temperature</b>	-40 to + 85°C
<b>Impedance</b>	50Ω
<b>Dimensions (L x W x H)</b>	18 mm x 7.3 mm x 0.8 mm

Measures from the evaluation board (121 mm x 48 mm x 0.8 mm PCB)

For additional information, please download the user manual from <http://www.fractus.com/main/fractus/documentation> or contact [info@fractus.com](mailto:info@fractus.com).