



fractus

Optimised Antennas
for Wireless Devices

DATA SHEET · SHORT-RANGE WIRELESS

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.

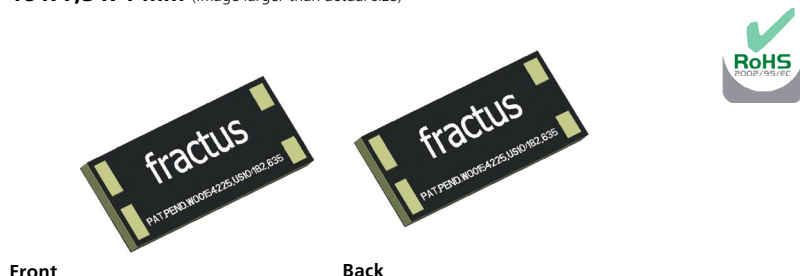
Fractus® EZConnect™ Zigbee™ Chip Antenna

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 x 7,3 x 1 mm (image larger than actual size)



Patent Pending: WO0154225, WO0122528, PCT/EP01/10589, PCT/EP02/07837, US60/613394, US60/627653 and PCT/EP02/07836

Product Benefits

■ Small form factor

Allows integration into space limited areas easily and effectively.

■ Broad bandwidth

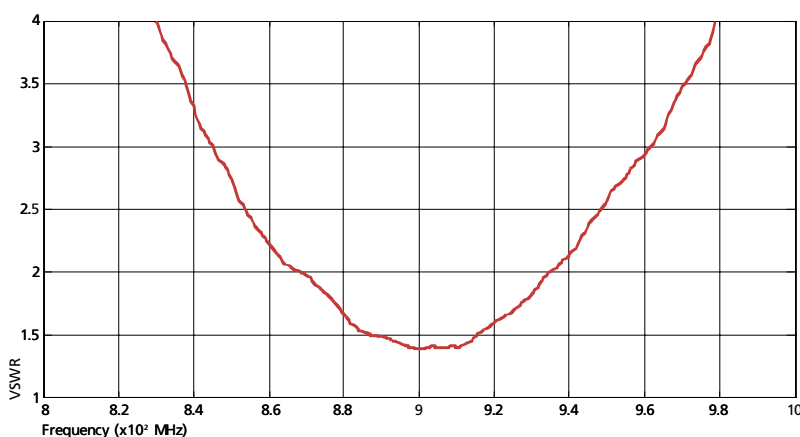
Ensures robust performance in different PCB dimensions and plastic housing, without the need for a matching network.

■ High performance

Optimises power consumption and increases device range.

■ Omnidirectional pattern

Increases device robustness due to a uniform radiation pattern.



Frequency Range	902 - 928 MHz
Efficiency	> 40 %
Peak Gain	> 0 dBi
VSWR	< 2:1
Weight	0.20 g
Temperature	-40 to +85 °C
Impedance	50 Ω unbalanced
Dimensions	18 x 7,3 x 1 mm

Measured results from a standard PCB of 120x65 mm

Please contact your sales representative at Richardson Electronics to obtain additional information on recommended configurations for different UWB devices. Richardson Electronics: www.rell.com Fractus: wireless@fractus.com Reference: **DS_FR05-S1-E-0-105_v01**

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