EZConnect[™] (FR05-S1-R-0-105)

Zigbee, RFID and ISM 868/915 (868 MHz, 902 – 928 MHz)

Fractus Antennas specializes in enabling effective mobile communications. Using Fractus technology, we design and manufacture optimized 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.

The 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. The EZConnect[™] antenna is built on glass epoxy substrate. 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 EZConnect[™] Zigbee Chip Antenna speeds your time to market by allowing you to easily integrate it within your industrial design (SMD mounting).

Product Benefits

Small form factor

Allows integration into space limited areas easily and efficiently.

Broad bandwidth

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

Omnidirectional pattern

Increases device robustness due to a uniform radiation pattern.

High performance

Optimizes power consumption and increases device range.

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

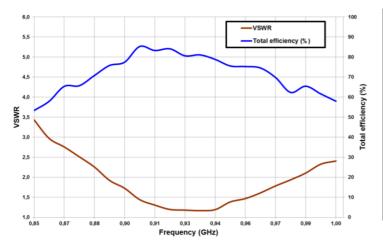


PAT US 7,148,850, US 7,202,822

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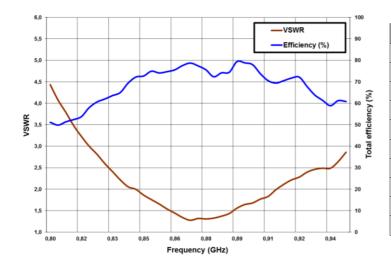
VSWR and Total Efficiency (%) for 915 MHz band



915 MHz Technical features Frequency range 902 – 928 MHz Average Efficiency 82.0 % Peak Gain 1.7 dBi 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		
Average Efficiency 82.0 % Peak Gain 1.7 dBi Radiation Pattern Omnidirectional VSWR < 2:1 Polarization Linear Weight 0.2 g Temperature -40 to + 85°C Impedance 50 Ω	915 MHz Technical features	
Peak Gain 1.7 dBi Radiation Pattern Omnidirectional VSWR < 2:1 Polarization Linear Weight 0.2 g Temperature -40 to + 85°C Impedance 50 Ω	Frequency range	902 – 928 MHz
Radiation Pattern Omnidirectional VSWR < 2:1	Average Efficiency	82.0 %
VSWR < 2:1 Polarization Linear Weight 0.2 g Temperature -40 to + 85°C Impedance 50 Ω	Peak Gain	1.7 dBi
Polarization Linear Weight 0.2 g Temperature -40 to + 85°C Impedance 50 Ω	Radiation Pattern	Omnidirectional
Weight0.2 gTemperature-40 to + 85°CImpedance50 Ω	VSWR	< 2:1
Temperature -40 to + 85°C Impedance 50 Ω	Polarization	Linear
Impedance 50 Ω	Weight	0.2 g
·	Temperature	-40 to + 85°C
Dimensions (L x W x H) 18.0 mm x 7.3 mm x 0.8 mm	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)

VSWR and Total Efficiency (%) for 868 MHz band



868 MHz Technical features	
Frequency range	868 MHz
Antenna Efficiency	78.1 %
Peak Gain	2.3 dBi
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)

See pictures of the evaluation boards and graphs of the specs in the <u>User Manual</u>.

For additional information, please visit www.fractusantennas.com or contact info@fractusantennas.com.