EZConnect[™] (NN01-105)

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.

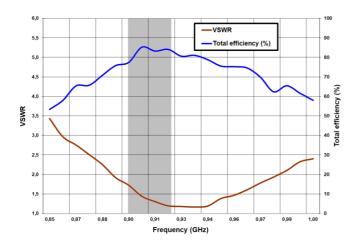
18.0 mm x 7.3 mm x 0.8 mm (image larger than real size)



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

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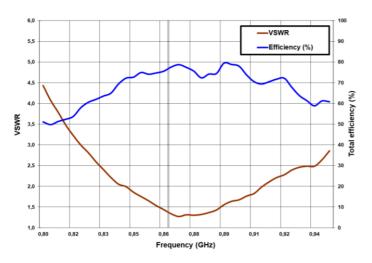


VSWR and Total Efficiency (%) for 868 MHz band

Technical features	902 – 928 MHz
Average Efficiency	82.0 %
Peak Gain	1.7 dBi
VSWR	< 2:1
Radiation Pattern	Omnidirectional
Polarization	Linear
Weight	0.2 g
Temperature	-40 to +125°C
Impedance	50 Ω
Dimensions (L x W x H)	18.0 mm x 7.3 mm x 0.8 mm

VSWR and Total Efficiency (%) for 915 MHz band

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



Technical features	868 MHz
Antenna Efficiency	78.1 %
Peak Gain	2.3 dBi
VSWR	< 2:1
Radiation Pattern	Omnidirectional
Polarization	Linear
Weight	0.2 g
Temperature	-40 to +125° 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 User Manual.

For additional information, please visit <u>www.fractusantennas.com</u> or contact <u>info@fractusantennas.com</u>.

If you need assistance to design your matching network, please contact <u>support@fractusantennas.com</u>, or try our free-of-charge¹ **NN Wireless Fast-Track** design service, you will get your chip antenna design including a custom matching network for your device in 24h¹. Other related to NN's range of R&D services is available at: <u>https://www.fractusantennas.com/rdservices/</u>

¹ See terms and conditions for a free NN Wireless Fast-Track service in 24h at: <u>https://www.fractusantennas.com/fast-track-project/</u>

