

ignion<sup>™</sup>

Your innovation.  
Accelerated.

# Reach Xtend<sup>™</sup> (NN01-001)

**Bluetooth, Zigbee,  
802.11 b/g/n WLAN  
(2.4 – 2.5 GHz)**

DATASHEET

Ignion specializes in enabling effective mobile communications. Using Ignion 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 Reach Xtend<sup>™</sup> Bluetooth® & 802.11b/g/n WLAN Chip Antenna is engineered specifically for devices operating at 2.4 GHz where high performance and low-cost are mandatory. The Reach Xtend<sup>™</sup> antenna is built on glass epoxy substrate.

Taking advantage of the space-filling properties, this small planar monopole antenna is ideal for use within indoor (highly scattered) environments. The Reach Xtend<sup>™</sup> Bluetooth® & 802.11b /g WLAN Chip Antenna speeds your time to market by allowing you to integrate it within your industrial design easily and efficiently.

### Product Benefits

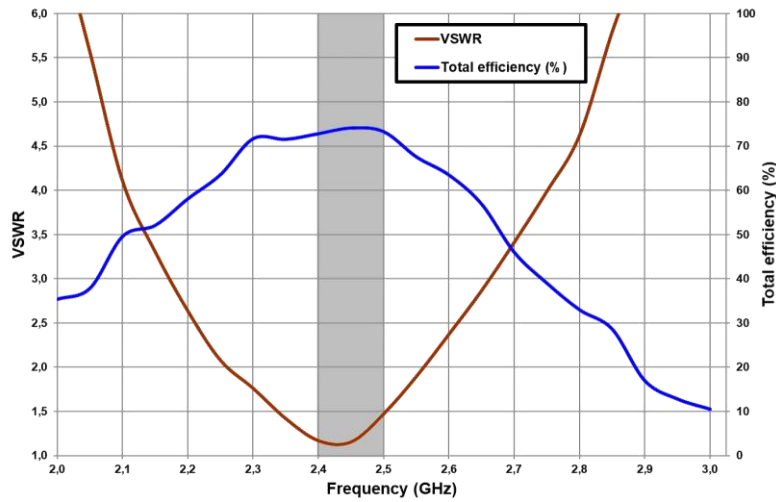
- **High efficiency**  
Increases your device's range and lengthens battery life.
- **Omnidirectional pattern**  
Optimizes device usage due to a uniform radiation pattern.
- **Small Volume**  
Allows integration into space limited areas easily and efficiently.
- **Multi-mode support**  
Works for Bluetooth and Wi-Fi 802.11 b/g/n standards.

**6.7 mm x 6.7 mm x 0.8 mm** (image larger than real size)



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

## VSWR and Total Efficiency (%) vs. Frequency (GHz)



Technical Features	2.4 GHz – 2.5 GHz
Average Efficiency	74.0 %
Peak Gain	1.3 dBi
VSWR	< 2:1
Radiation Pattern	Omnidirectional
Polarization	Linear
Weight (approx.)	0.1 g
Temperature	-40 to + 125 °C
Impedance	50 Ω
Dimensions (L x W x H)	6.7 mm x 6.7 mm x 0.8 mm

Measures from the evaluation board (48.0 mm x 23.0 mm x 1.0 mm)

See pictures of the evaluation boards and graphs of the specs in the [User Manual](#).

For additional information, please visit [www.ignion.io](http://www.ignion.io) or contact [info@ignion.io](mailto:info@ignion.io).

If you need assistance to design your matching network, please contact [support@ignion.io](mailto:support@ignion.io), or try our free-of-charge<sup>1</sup> **NN Wireless Fast-Track** design service, you will get your chip antenna design including a custom matching network for your device in 24h<sup>1</sup>. Other related to NN's range of R&D services is available at: <https://www.ignion.io/rdservices/>

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

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