ignion

Your innovation.
Accelerated.

COMPACT REACH Xtend™ (NN01-102)

DATASHEET

COMPACT REACH Xtend™ (NN01-102) - Bluetooth®, Zigbee®, 802.11 b/g/n WLAN (2.4 – 2.5 GHz)

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.

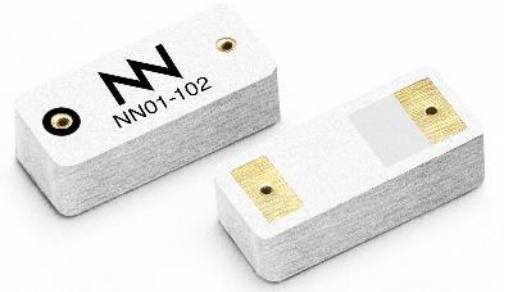
The Compact Reach Xtend™ chip antenna for Bluetooth® and 802.11 b /g WLAN is a tiny rectangular 3D-shaped antenna suitable for headset, compact flash (CF), secure digital (SD) and other small PCB devices operating at 2.4 GHz where high performance and low-cost are mandatory. The Compact Reach Xtend™ antenna is built on glass epoxy substrate. Its broad bandwidth ensures high quality signal reception and transmission across wireless devices and different plastic housing designs.

Taking advantage of the space-filling properties, this small mono-pole antenna is ideal for use within indoor (highly scattered) environments. The Compact Reach Xtend™ chip antenna speeds your time to market by allowing you to easily integrate it within your industrial design (SMD mounting).

Product Benefits

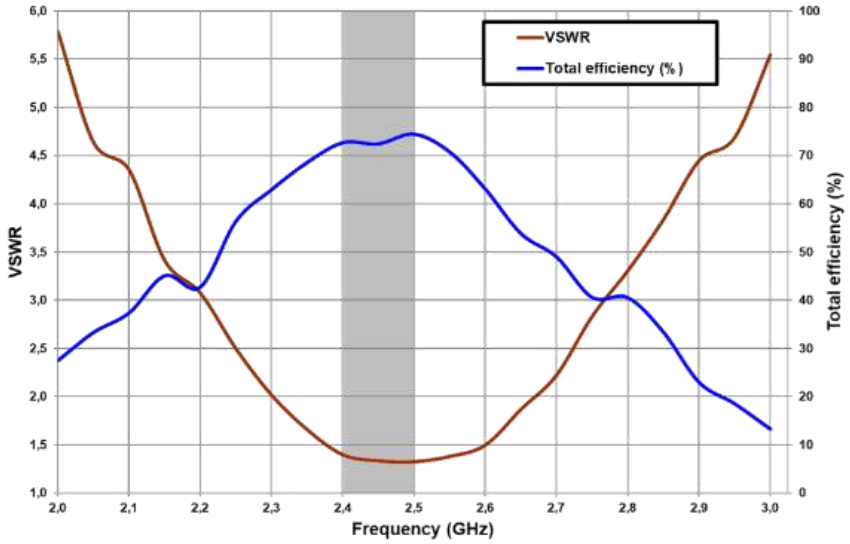
- **Small form factor**
  Allows integration into space limited areas easily and efficiently with minimum clearance area.
- **Broad bandwidth**
  Ensures robust performance when considering different plastic housing and close body proximity.
- **Omnidirectional pattern**
  Optimizes device usage due to a uniform radiation pattern.
- **Multi-mode support**
  Works for Bluetooth, and Wi-Fi 802.11 b/g/n standards.

7.0 mm x 3.0 mm x 2.0 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 – 2.5 GHz
Average Efficiency	72.2 %
Peak Gain	1.7 dBi
VSWR	< 2:1
Radiation Pattern	Omnidirectional
Polarization	Linear
Weight (approx.)	0.1 g
Temperature	-40 to +125 ºC
Impedance	50 Ω
Dimensions (L x W x H)	7.0 mm x 3.0 mm x 2.0 mm

Measures from the evaluation board (47.0 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 or contact info@ignion.io.

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

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

ignion

Your innovation.
Accelerated.

Contact:
support@ignion.io
+34 935 660 710

Barcelona

Av. Alcalde Barnils, 64-68 Modul C, 3a pl.
Sant Cugat del Vallés
08174 Barcelona
Spain

Shanghai

Shanghai Bund Centre
18/F Bund Centre, 222 Yan'an Road East,
Huangpu District
Shanghai, 200002
China

New Dehli

New Delhi, Red Fort Capital Parsvnath Towers
Bhai Veer Singh Marg, Gole Market,
New Delhi, 110001
India

Tampa

8875 Hidden River Parkway
Suite 300
Tampa, FL 33637
USA