

ignion[™]

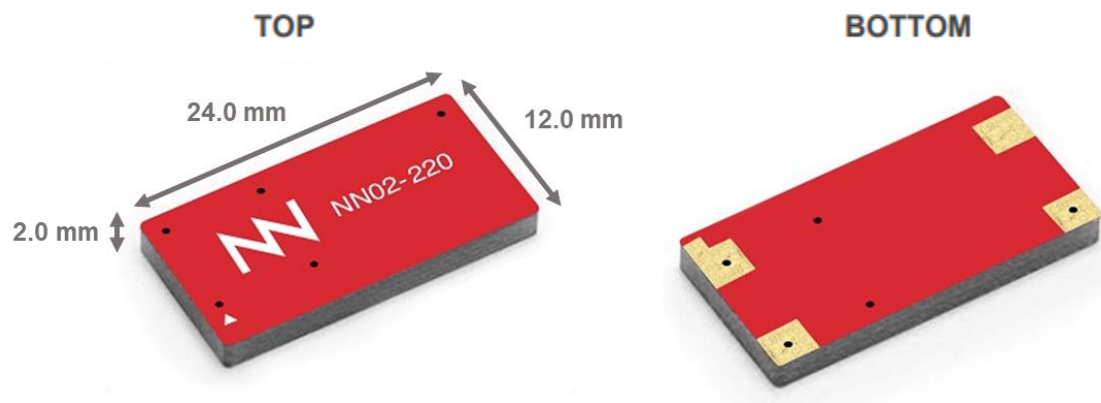
Your innovation.
Accelerated.

ALL mXTEND[™] (NN02-220)

DATASHEET

ALL mXTEND[™] (NN02-220)

The ALL mXTEND[™] chip antenna component has been specifically designed for providing multiband performance in mobile applications, such as LTE (698 – 960MHz and 1710 – 2690MHz) that enables **worldwide coverage**. Among other applications, it is used for designing **Smart Meters** and **Sharkfin** devices able to operate in full mobile communication standards.



Product Benefits

- **High Performance:** A global cellular antenna for IoT and mobile devices with a high performance in the subGHz frequency range.
- **Multiband:** All cellular bands covered: 2G/3G/4G/5G and NB-IoT/LTE-M applications in a 24.0 mm x 12.0 mm x 2.0 mm antenna package.
- **Global reach:** Through multiband performance (worldwide standards compatible).
- **Reliability:** Off-the-Shelf standard product, no antenna part customization (electronic optimization).
- **Use cases:** Smart metering, smart city sensors, automotive.

Operation Bands Summary

- GSM, UMTS, LTE (698 – 960MHz and 1710 – 2690MHz)

1. AVAILABLE SOLUTIONS SUMMARY

Class	Frequency Regions	Frequency range	More detailed info
1 Port	2	698 – 960 MHz & 1710 – 2690 MHz	<u>CELLULAR MOBILE</u>
1 Port	2	698 – 960 MHz & 1710 – 2690 MHz	<u>CELLULAR FOR SMART METERS</u>
1 Port	2	698 – 960 MHz & 1710 – 2690 MHz	<u>CELLULAR FOR SHARKFIN AUTOMOTIVE</u>

2. DETAILED AVAILABLE SOLUTIONS

2.1. LTE SOLUTION

Technical features	698 – 960 MHz	1710 – 2690 MHz
Average Efficiency	> 55 %	> 75 %
Peak Gain	2.3 dBi	3.1 dBi
VSWR	< 3:1	
Radiation Pattern	Omnidirectional	
Polarization	Linear	
Weight (approx.)	1.23 g	
Temperature	-40 to +125 °C	
Impedance	50 Ω	
Dimensions (L x W x H)	24.0 mm x 12.0 mm x 2.0 mm	

Technical features. Measures from the evaluation board (131 mm x 60 mm x 1 mm).

2.2 LTE FOR SMART METERS SOLUTION

Technical features	698 – 960 MHz	1710 – 2690 MHz
Average Efficiency	> 65 %	> 70 %
Peak Gain	2.2 dBi	0.1 dBi
VSWR	< 3:1	
Radiation Pattern	Omnidirectional	
Polarization	Linear	
Weight (approx.)	1.23 g	
Temperature	-40 to +125 °C	
Impedance	50 Ω	
Dimensions (L x W x H)	24.0 mm x 12.0 mm x 2.0 mm	

Technical features. Measures from the evaluation board (145 mm x 130 mm x 1 mm).

2.3 LTE FOR SHARKFIN AUTOMOTIVE SOLUTION

³ Technical features	698 – 960 MHz	1710 – 2690 MHz
Average Efficiency	> 35 %	> 60 %
Peak Gain	1.8 dBi	7.1 dBi
VSWR	< 4.5:1	
Radiation Pattern	Omnidirectional	
Polarization	Linear	
Weight (approx.)	1.23 g	
Temperature	-40 to +125 °C	
Impedance	50 Ω	
Dimensions (L x W x H)	24.0 mm x 12.0 mm x 2.0 mm	

Technical features. Measures from the evaluation board (40 mm x 40 mm x 1 mm) mounted at a centre of metallic ground plane of 600 mm x 600 mm.

If you need assistance to design your matching network, please contact support@ignion.io

You can also try our free of charge¹ **NN Wireless Fast Track service** you will receive a tailored antenna design approach for free in 24h¹. discover the feasibility of your next wireless project including the antenna!

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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Antennas](#) category:

Click to view products by [Fractus Antennas](#) manufacturer:

Other Similar products are found below :

[GAN30084EU](#) [930-033-R](#) [GW17.07.0250E](#) [1513563-1](#) [EXE902SM](#) [APAMPG-117](#) [MAF94383](#) [W3908B0100](#) [W6102B0100](#) [YE572113-30RSMM](#) [108-00014-50](#) [66089-2406](#) [A09-F8NF-M](#) [A09-F5NF-M](#) [RGFRA1903041A1T](#) [W3593B0100](#) [W3921B0100](#) [SIMNA-868](#) [SIMNA-915](#) [SIMNA-433](#) [W1044](#) [W1049B090](#) [WTL2449CQ1-FRSMM](#) [CPL9C](#) [EXB148BN](#) [0600-00060](#) [TRA9020S3PBN-001](#) [GD5W-28P-NF](#) [MA9-7N](#) [GD53-25](#) [GD5W-21P-NF](#) [EXB144SM](#) [C37](#) [MAF94051](#) [GD35-17P-NF](#) [P1744](#) [MA9-5N](#) [EXD420PL](#) [B1322NR](#) [QWFTB120](#) [MAF94271](#) [MAF94300](#) [GPSMB301](#) [FG4403](#) [AO-AGSM-OM54](#) [5200232](#) [MIKROE-2349](#) [WCM.01.0111](#) [MIKROE-2393](#) [MIKROE-2352](#)