

NB2800-NLWac-G

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Product Information NB2800-NLWac-G
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High-Performance Wireless Router with 5G-NR, LTE, WLAN, Gigabit Ethernet, SSD Storage, GNSS, ITxPT and E-Mark



Keyfeatures

Mobile / Cellular	1x 5G-NR, 1x LTE, UMTS
SIM	4x Micro SIM
WiFi / WLAN	1x Dual-band IEEE 802.11ac (Wi-Fi 5)
Ethernet	2x Gigabit Ethernet
Power	12 VDC to 48 VDC Ignition Sense
Positioning	Multi-GNSS
Temperature	-25 °C to +70 °C
Software	Routing, Network Services, VPN, Firewall, Link Management, Supervisor, LXC, SDK, free updates
Compliance	CE (RED), Vehicle (UNECE-R10, UNECE-R118)
Modularity	Extensions on request

Product Description

The NB2800 provides in-vehicle wireless Internet access. The router is equipped with a 5G-NR module, a LTE module, a WiFi access points with the latest IEEE 802.11ac (Wi-Fi 5) standard, GNSS for location and 2 Gigabit Ethernet ports. Thanks to the integrated ignition detection, the NB2800 can remain switched on even after the vehicle has been switched off. This allows the safe completion of all tasks.

The router meets the UNECE-R10 (E-Mark) and UNECE-R118 regulations. This, combined with its numerous features and high performance, makes it the ideal device for applications such as Passenger WiFi, Passenger Information and CCTV.

The software is based on well proven components including an embedded Linux operating system and a powerful communication protocol suite. Customer specific software extensions may be implemented via a sophisticated SDK.

Applications

- Passenger WiFi
- Passenger Infotainment
- CCTV
- Voice Communication
- eMobility

Specifications

1x Mobile / Cellular

Multimode 5G-NR, LTE, UMTS 5G-NR

n1, n3, n7, n8, n20, n28, n38, n40, n41, n77, n78

4G - LTE

B1, B3, B7, B20, B28, B34, B38, B40, B42, B43

3G - DC-HSPA+/UMTS

B1, B3, B8

Specification

Cat. 20 up to 7CA

MIMO 4x4 MIMO in 5G support on n1, n3, n7 and LTE B1, B3, B7, B40, B42, B43 up to 5.5 Gbps DL / 2.7 Gbps UL
5G NR Modes Sub-6 FDD and TDD
5G Core SA and NSA operations
3GPP LTE/5G Rel. 15, 3G HSPA+ Rel. 18

Region

EMEA (APAC or NA on request)

Connector

8x FAKRA D-coded

SIM

4x Micro SIM - 3FF

1x Mobile / Cellular

Multimode LTE, UMTS and GSM

4G - LTE

B1 (2100), B3 (1800), B5 (850), B7 (2600), B8 (900), B20 (800)

3G - DC-HSPA+/UMTS

B1 (2100), B2 (1900), B5 (850), B8 (900)

2G - GSM/GPRS/EDGE

B2 (1900), B3 (1800), B5 (850), B8 (900)

LTE Specification

LTE Cat 4, 2x2 MIMO
DL 150 Mbps / UL 50 Mbps

Voice

CSFB

Region

EMEA

Connector

2x FAKRA D-coded

SIM

4x Micro SIM - 3FF

1x WiFi / WLAN

Standard

IEEE 802.11a/b/g/n/ac (Wi-Fi 5)
Dual-band 2.4/5 GHz
2x2 MIMO

Bit rate (max)

300 Mbps 2.4 GHz, 866 Mbps 5 GHz

Modes

Client or Access Point (max. 100 Clients)

Connector

2x FAKRA I-coded

2x Ethernet

Standard

1000Base-TX, Auto MDIX

Speed

10 / 100 / 1000 Mbps

Connector

2x RJ45

1x USB

USB 3.0 Host Port

Connector

1x Type A

Positioning

GNSS Receiver

BeiDou, Galileo, GLONASS, GPS/QZSS

Sensitivity

Up to -167 dBm, up to 2.5m CEP

Antennas

Active or passive

Connector

1x FAKRA C-coded

1x Serial

Protocol

RS-232

Signals

TX, RX

Bit rate

Up to 1 Mbps

Connector

1x Terminal block header 5 mm

System

Core

1.3 GHz dual-core, 1 GB RAM, 4 GB flash

Power

Nominal Input voltages

12, 24, 48 VDC (-25 % / +20 %)

Maximal Power Consumption

20 W

Ignition Sense

Input with delayed shutdown

Connector

1x Terminal block header 5 mm

Other

Mounting

Bracket (wall mounting)

Dimensions

Width 164/190 mm x height 58 mm x depth 139.5 mm

Weight

ca. 1200 g

Environment

Operating Temperature

-25 °C to +70 °C

Ingress Protection Level

IP40

Software

Features

Routing, Network Services, VPN, Firewall, Link Management, Supervisor, SDK, free updates

Licenses (optional)

Voice Gateway, OpenVPN- and DynDNS Server, GNSS, LXC Virtualization, E-Mark, ITxPT, Enhanced RF Configuration, FMS2IP

Certifications

Compliance

CE according to 2014/53/EU (RED), Vehicle according to UNECE-R10, UNECE-R118

Standards

EN 300328, EN 300440, EN 301489-1, EN 301489-17, EN 301511, EN 301893, EN 301908-2, EN 302502, EN 55032, EN 61000-6-2, EN 61000-6-3, EN 50121-3-2, EN 62311, EN 62368-1, EN 55035, EN 301908-1, EN 301489-52, UNECE-R10, UNECE-R118

Order number

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