

Ref: PCN_NB800_20200415

Product Change Notice

NB800 Product Update

Summary

Effective 15th of April 2020 NetModule introduces an NB800 product update to extend the feature set and provide additional modem options for international coverage.

Product Change

The following capabilities have been additionally introduced with the new product hardware revision B02 in combination with NRSW 4.4:

- LTE Cat 4 Modem options for international coverage (Regions: EMEA, NA, APAC/LATAM)
- CSFB (GSM / UMTS) voice call support (requires software key V)
- GNSS positioning support (requires software key G)
- Real time clock for timed system wakeups
- Support for additional SIM chip on request (software selection between SIM card and SIM chip)
- Improved RF antenna performance

Changes of existing features and mechanics comparing to current revision A:

- LTE bands B2, B4 are not supported in EMEA modem.
- Additional antenna connector A5 for GNSS
- Slightly adjusted position of SMA antenna connectors A1 – A4 and SIM slot

There is no change in the software update process:

- The product update will be supported with NRSW 4.4 and later.
- NRSW 4.3 and earlier do not support NB800 Rev. B02.

Affected Products

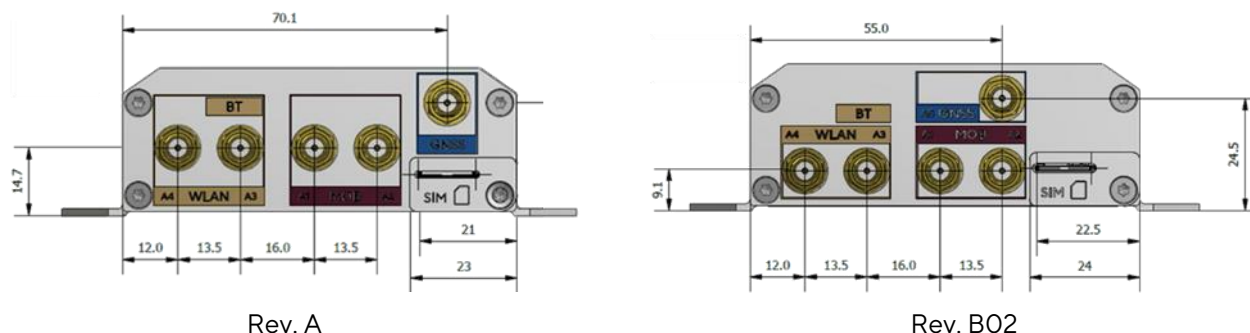
Current NB800 offering is not affected by this change. The product update is introduced with additional product variants:

Order Code	Product Description
NB800-LSu-GE	LTE +USB +GNSS +E-Mark
NB800-LWWtSu-GE	LTE +WLAN +BT/BLE +USB +GNSS +E-Mark
NB800-LWWtSu2Cm-GE	LTE +WLAN +BT/BLE +USB +2xCAN-passive +GNSS +E-Mark

Should you have any questions or requests, please do not hesitate to contact your NetModule sales representative at sales@netmodule.com or +41319852510

Appendix - Rear Panel

The antenna connectors have been moved.



Rev. A

Rev. B02

Figure 1: Rear panel changes (front panel remains unchanged)

Appendix - Modem Support

NB800 Product Revision	Rev. A	Rev. B02	Rev. B02	Rev. B02
Modem Order Code	-L		-Lbb	-Lg
Region	EMEA		NA	APAC / LATAM
LTE Bands	B1(2100), B2(1900), B3(1800), B4(AWS), B5(850), B7(2600), B8(900), B20(800)	B1(2100), B3(1800), B5(850), B7(2600), B8(900), B20(800)	B2(1900), B4(1700), B5(850), B7(2600), B17(700)	B1(2100), B3(1800), B5(850), B7(2600), B8(900), B28(750)
DC-HSPA+/UMTS Bands (MHz)	B1(2100), B2(1900), B5(850), B8(900)		B1(2100), B2(1900), B4 (AWS), B5(850), B8(900)	B1(2100), B2(1900), B5(850), B8(900),
GSM/GPRS/EDGE Bands (MHz)	B5(850), B8(900), B3(1800), B2(1900)			
LTE Category	4			
MIMO	2x2			
Data Rates (max): downlink / uplink	150 Mbps / 50 Mbps			
Voice, Audio	no	yes (CSFB)		
Modem Vendor, Type	Huawei, ME909s-120	u-blox, TOBY-L210	u-blox, TOBY-L200	u-blox, TOBY-L280

Table 1: Comparison of modem features

Appendix - Type Label

The type label shows the product revision (No. 11)

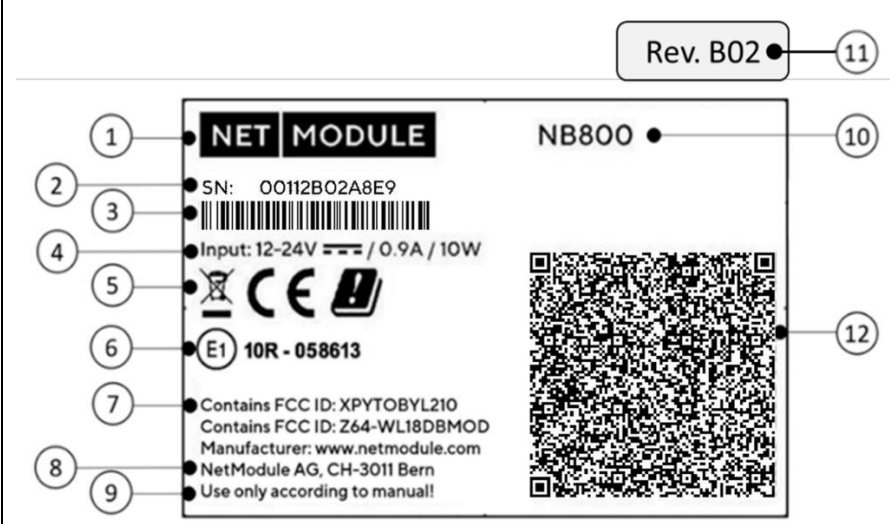
Label	No.	Description
 <p>The diagram shows a rectangular label for the NB800 product. It includes the NetModule logo, model number NB800, serial number 00112B02A8E9, input specifications (12-24V / 0.9A / 10W), FCC IDs, manufacturer information, and a QR code. Numbered callouts point to: 1. Logo, 2. SN, 3. SN barcode, 4. Input specs, 5. CE mark, 6. E1 mark, 7. FCC IDs, 8. Manufacturer info, 9. Safety notice, 10. Model name, 11. Product revision, 12. QR code.</p>	1	NetModule corporate logo
	2	Serial Number
	3	Serial Number as barcode
	4	Nominal voltage and power consumption
	5, 6	Symbols
	7	Federal Communications Commission ID of integrated components
	8	NetModule address
	9	Safety Notice
	10	Product Name
	11	Product hardware revision (optional)
	12	QR code with various identification data

Table 2: New type label format.

Appendix - Product Change History

Hardware Revision	Description	Software	Product Status
A	Initial version	NRSW 4.1. and later	Active, 01-Jul-17
A	All product variants provide the 8-pin power / extension connector (except NB800-USu)	-	Active, 8-Jun-18
B02	<p>New features:</p> <ul style="list-style-type: none"> - LTE Cat 4 Modem options for international coverage and compliance (Regions: EMEA, NA, APAC/LATAM) - CSFB (GSM / UMTS) voice call support - GNSS positioning support - Real time clock for timed system wakeups - Support for additional SIM chip (software selection between SIM card and SIM chip), on request - Improved RF antenna performance <p>Changes:</p> <ul style="list-style-type: none"> - LTE bands B2, B4 are not supported in EMEA modem - Additional antenna connector A5 for GNSS - Adjusted position of SMA antenna connectors A1 - A4 	NRSW 4.4. and later	Active, 15-Apr-20

Table 3: NB800 Product Change History