

Ref: PCN_NB800_20200901

Product Change Notice

NB800 Product Update

Summary

Effective 1st of September 2020 NetModule introduces new NB800 features and additional modem options.

Affected Products

The following NB800 standard products will be replaced by the new NB800 Rev. B02 product variants in combination with NRSW 4.4 (and later):

NB800 Rev. A (Discontinued)		NB800 Rev. B02 (Replacement)	
Order Code	Description	Order Code	Description
NB800-LSu	LTE +USB	NB800-LSu-G	LTE +USB +GNSS
NB800-LScSu	LTE +COM-I/O +USB	NB800-LScSu-G	LTE +COM-I/O +USB +GNSS
NB800-LWWtSu	LTE +WLAN +BT/BLE +USB	NB800-LWWtSu-G	LTE +WLAN +BT/BLE +USB +GNSS
NB800-LWWt	LTE +WLAN +BT/BLE	NB800-LWWtSu-G	LTE +WLAN +BT/BLE +USB +GNSS

Table 1: List of affected NB800 standard products

Product Change

The following capabilities have been additionally introduced with the new product hardware revision B02:

- 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
- 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

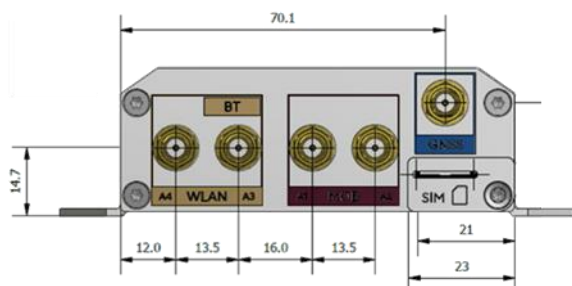
There is no change in the software update process:

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

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

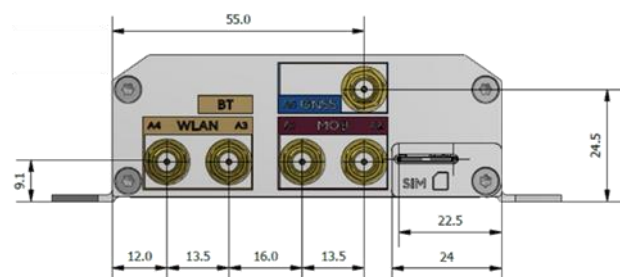
Appendix – Mechanical Changes

Rev. A with old corporate design



Rev. A

Rev. B02 with new corporate design



Rev. B02

Figure 1: Rear panel changes, antenna connectors moved (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 (MHz)	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 2: Comparison of modem features

Appendix - Type Label

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

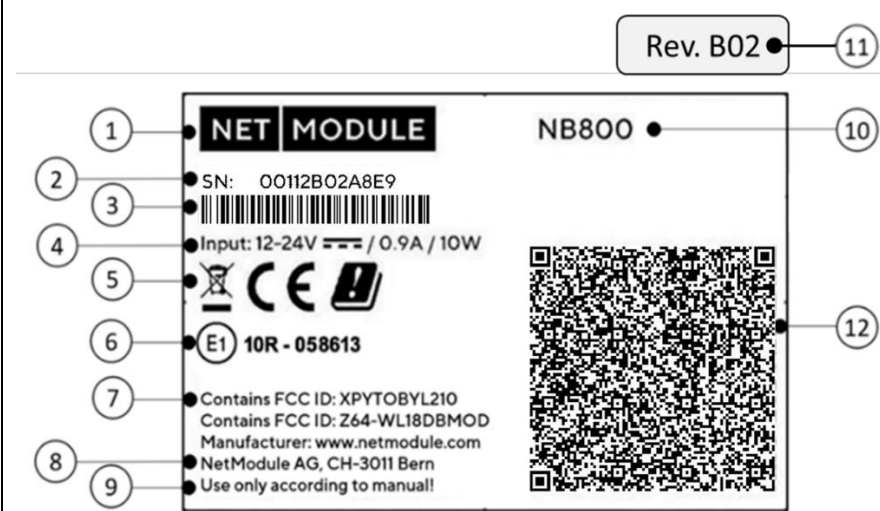
Label	No.	Description
 <p>The diagram shows a rectangular label for the NetModule NB800. It includes the NetModule logo, model number NB800, serial number 00112B02A8E9, input specifications (12-24V / 0.9A / 10W), FCC IDs, manufacturer information, and a QR code. Numbered callouts point to: 1. Logo, 2. SN, 3. SN barcode, 4. Input specs, 5. CE mark, 6. E1 mark, 7. FCC IDs, 8. Manufacturer info, 9. Safety notice, 10. Model number, 11. Product revision (Rev. B02), and 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 3: New type label format (introduced with new corporate design)

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 – Introduced new corporate design 	NRSW 4.4. and later	Active, 15-Apr-20

Table 4: NB800 Product Change History