Vicotee

AURORA XDLSN3 – NBIoT

PN: 1101134

ABOUT

AURORA XDLSN3 is a modular and easy to customize with any sensors. The module is a twofold unit consists of one radio mainboard unit of either NBIoT, SMARTMESH IP, Sigfox and LoRa and sensor board. Both boards have a MCU, they can handle and analyze high speed data on the module.

This radio mainboard is equipped with a CR123, 1550mA battery. Sensor board will also be equipped with the same CR123 battery. The batteries from each board are connected in parallel to extend the battery life. The module [1] will operate for years. [2]

The AURORA XDLSN3 – NBIoT is equipped with Narrowband IoT RF technology which. Narrowband uses the existing 4G network, it is highly energy efficient with high security and good range.

The radio mainboard supports auto-attach mode only (automatic operator selection). **Forcing the device to manual selection of specific operator is not possible**.

PARAMETER	Min	Max
Storage temperature [3]	-20° C	40° C
Operating Temperature	-20° C	55° C
Supply Voltage	2.2 V	3.8 V
Input RF Level	-	10 dBm
Output RF Level	-	23 dBm
Dimension [4]		
Length	-	6.7 cm
Width	-	4.7 cm
Depth	-	3.2 cm
IP Rating	IP65	

RF TRANSCEIVER SPECIFICATION

PARAMETER	Min	Max
RF sensitivity 3GPP Compliance	-	-108.2 dBm
Sleep mode current [5]	-	1.65 µA
Idle current	-	5.3 mA
Operating current [6]	90 mA	195 mA

(1) A module is a radio mainboard connects with a sensor board
(2) Battery life is depended on sensor type, number of measurements per hour, length of the messages and battery self-discharge (typical 1-2% per year).
(3) Storage temperature with lithium battery.
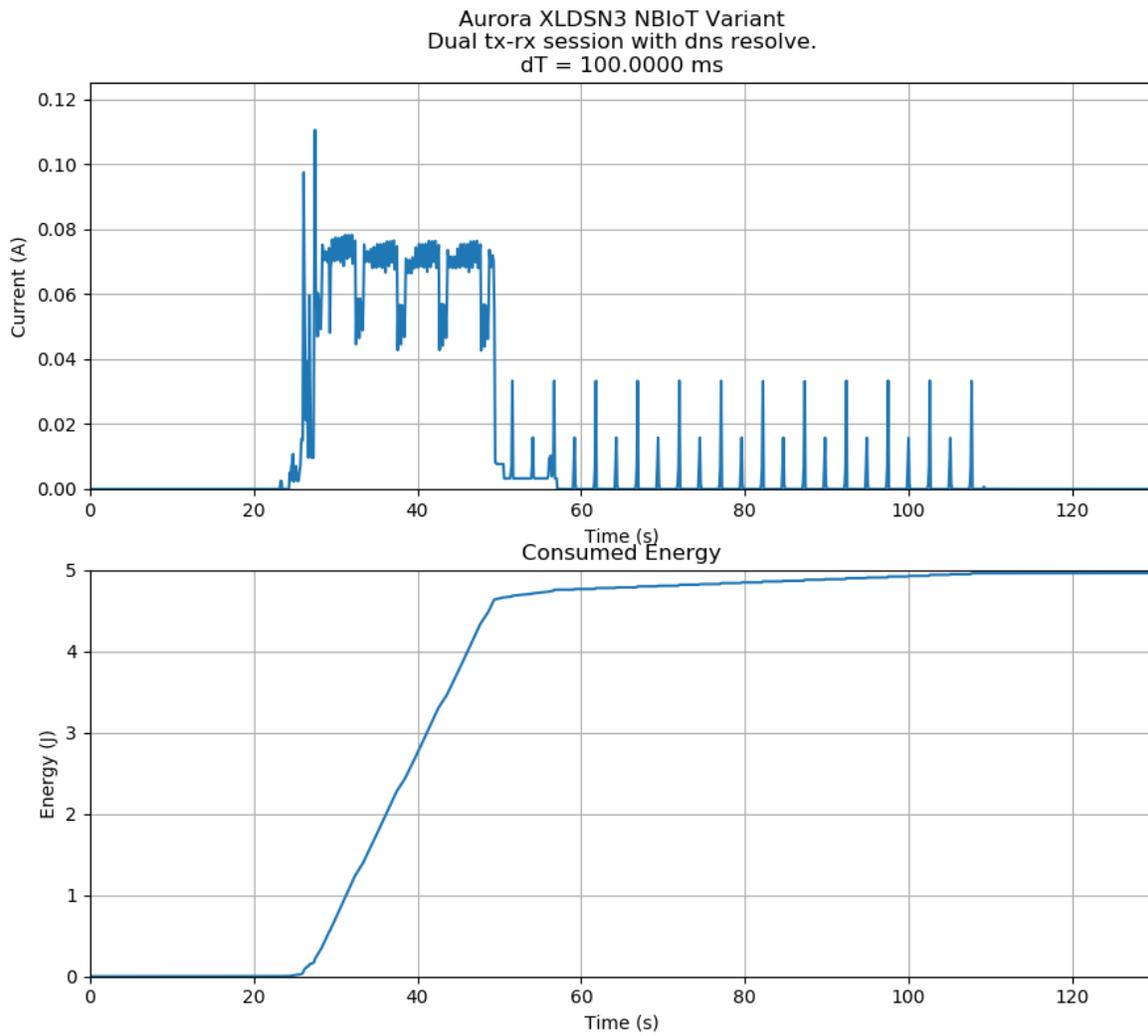(4) Without external antenna. Dimension may change depending on snap-in board to be used.
(5) Preliminary, assumes PSM mode is operator supported
(6) Active data call 0dBm - 23dBm

POWER CONSUMPTION

Following charts show power consumptions for transmitting data and when the module is idling.

Aurora XLDSN3 NBIoT Variant
Dual tx-rx session with dns resolve.
dT = 100.0000 ms

Aurora XLDSN3 NBIoT Variant
Sleep Current, no sensor board.
dT = 100.0000 ms

Consumed Energy