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DConnect NB

DDNB 1.0

Description

DConnect NB IoT is the new module, developed by DTI, that connects electronic devices to the narrowband. It is a versatile solution: it can be both external source and battery powered. It can feature a series of GPIO for stand-alone use.

NB- IoT (Narrowband Internet of Things) is a LPWAN (Low Power Wide Area Network) radio technology standard that has been developed to allow the communication among a wide range of IoT devices with a light data exchange (125Kbit/s max) and fixed installation.

NB-IoT main advantages:

- **Energy efficiency:** technologies like the NB-IoT feature low energy consumption.
- **Low cost:** communication modules technology is simple, and the price is lower compared to traditional solutions.
- **Wide coverage:** NB-IoT signal also covers remote, industrial, and underground places, where other signals can be interrupted.

- **Low latency**
- **Wide range of supported connections:** it is possible to connect tens of thousands of devices (up to 150.000 for each cell).
- **Easy deployment:** unlike LTE-M1, the NB-IoT does not need a gateway to ensure connectivity.
- **Versatility:** global roaming and localization allows a wide installation flexibility.

Technical data

Power supply	Battery 3,6V type LI-SO-CL
	External 5÷12Vcc
SIM type	Micro SIM for NB IoT
LTE bands	3, 5, 8, 20, 28, +
Data rate	NB2
Communication	RS485/TTL
Configuration	Settings jumper
Keys (on the board)	2 buttons
Visualizations (on the board)	1 red LED
	1 green LED
Dimensions	38x80 mm

Board connectors

CN1
RS485
and power supply 5÷12Vcc

SW1-SW2
Programmable switch

P7
Configurable output:
input/output

P4
Digital input
(volumetric type)

P5
Input for NTC probe

P2
Standard digital input (x3)

J1
UFL connector
for external antenna