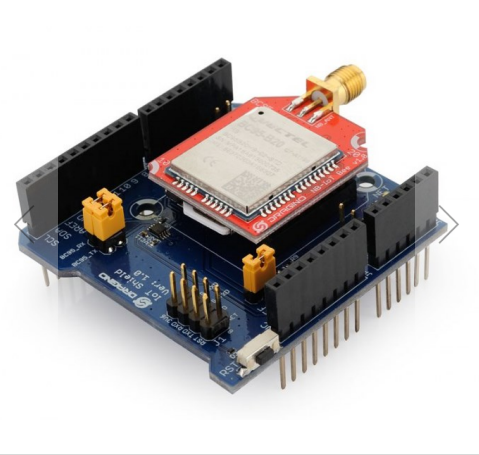


Dragino NB-IoT Shield-B5

SKU 109030002

NarrowBand-Internet of Things (NB-IoT) is a standards-based low power wide area (LPWA) technology developed to enable a wide range of new IoT devices and services

- 1 + CN Warehouse

Add to Cart

Description | Documents | Learn | Reviews | FAQS

NarrowBand-Internet of Things (NB-IoT) is a standards-based low power wide area (LPWA) technology developed to enable a wide range of new IoT devices and services. NB-IoT significantly improves the power consumption of user devices, system capacity and spectrum efficiency, especially in deep coverage. Battery life of more than 10 years can be supported for a wide range of use cases.

New physical layer signals and channels are designed to meet the demanding requirement of extended coverage – rural and deep indoors – and ultra-low device complexity. Initial cost of the NB-IoT modules is expected to be comparable to GSM/GPRS. The underlying technology is however much simpler than today's GSM/GPRS and its cost is expected to decrease rapidly as demand increases.

Arduino is an open-source electronics platform based on easy-to-use hardware and software, it is an easy tool for fast prototyping, aimed at students without a background in electronics and programming. As soon as it reached a wider community, the Arduino board started changing to adapt to new needs and challenges, differentiating its offer from simple 8-bit boards to products for IoT applications, wearable, 3D printing, and embedded environments. All Arduino boards are completely open-source, empowering users to build them independently and eventually adapt them to their particular needs. The software, too, is open-source, and it is growing through the contributions of users worldwide.

NB-IoT Shield is an expansion board for Arduino to add NB-IoT technology. With NB-IoT Shield and Arduino, user can study/evaluate and do POC for NB-IoT solution rapidly.

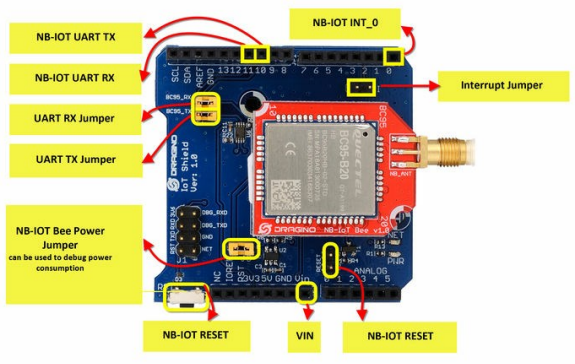
Features:

- Support **850Mhz** NB-IoT Bands
- Low power consumption
- Wide area coverage
- AT command to control
- Auto support 3.3v or 5v Arduino board
- Compatible with Arduino Leonardo, Uno, Mega2560, DUE... etc

Applications:

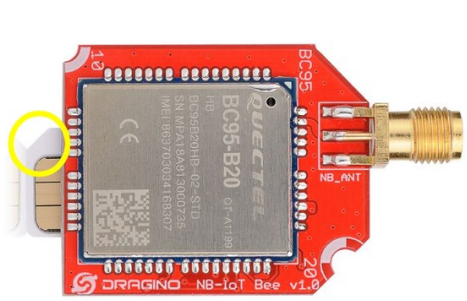
- Smart metering (electricity, gas and water)
- Facility management services
- Intruder and fire alarms for homes & commercial properties
- Connected personal appliances measuring health parameters
- Tracking of persons, animals or objects
- Smart city infrastructure such as street lamps or dustbins
- Connected industrial appliances such as welding machines or air compressors

System Structure:



UART_TX and UART_RX are connected to D10/D11 of Arduino. To use other pins for UART communication, user can remove the UART_TX and UART_RX jumper and wire the right side of these headers to other pins of UNO. The software serial pins also need to do related changes in Sketch.

SIM Card Direction:



Technical details

Dimensions	110mm x65mm x35mm
Weight	G.W 53.5g
Battery	Exclude

Part List

NB-IoT Shield	1
NB-IoT Antenna	1

ECCN/HTS

ECCN	3A991.a
HSCODE	8517709000
USHSCODE	85177000