wappsto

by Seluxit

Wappsto:bit

Making IoT Child's Play

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Getting started

For the full guide visit: **bit.wappsto.com/setup**

1

Setup your Wappsto:bit using the Wappsto phone APP

Apple's App Store | Google Play

2

on start

show icon

Program in MakeCode for micro:bit, using the official Wappsto extension

3
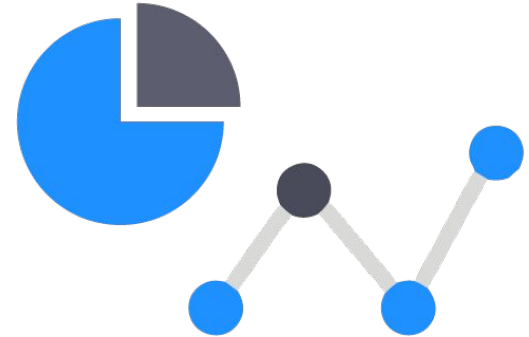
Control your device and view data on Wappsto or the Wappsto APP.

You can also set up personal dashboards and share data with your friends!

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What is Wappsto?

Wappsto:bit is the ideal DIY IoT tool for students and makers alike. Now a 10 year old can create and IoT device in 10 minutes - but a maker can take it to extreme depths due to it's flexibility.

Wappsto:bit is an extension board for the popular BBC micro:bit with a pre-configured and out-out-of-the-box cloud connection directly to Wappsto using either 5G NB-IoT or Wi-Fi connectivity.

Wappsto Dashboard powered by Seluxit is a powerful IoT platform featuring an easily customizable Dashboard that makes visualizing live or historical data a breeze.

Wappsto APP for IOS and Android, lets you easily setup Wi-Fi on your IoT devices using Bluetooth. And lets you access and control all of your IoT devices on the go.
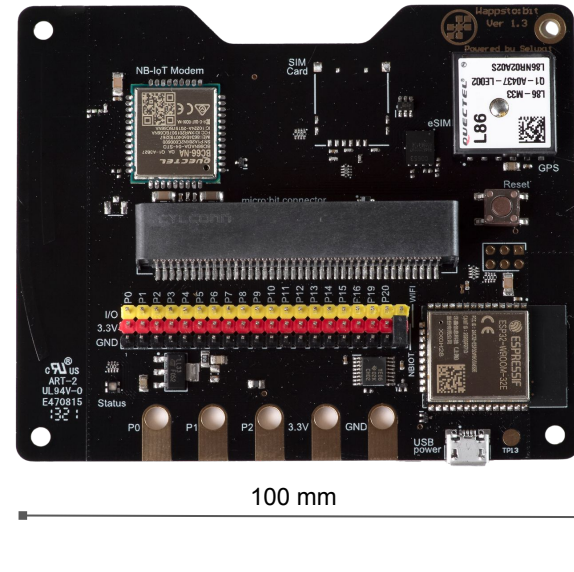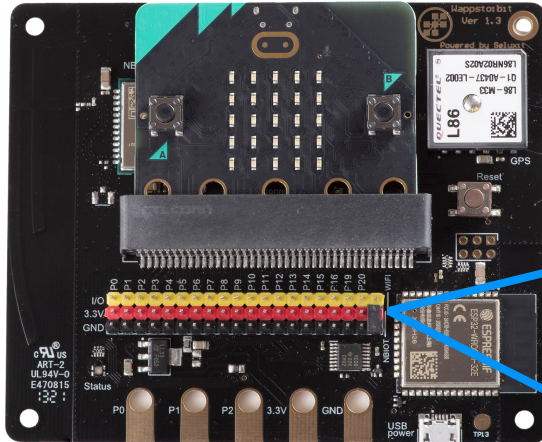
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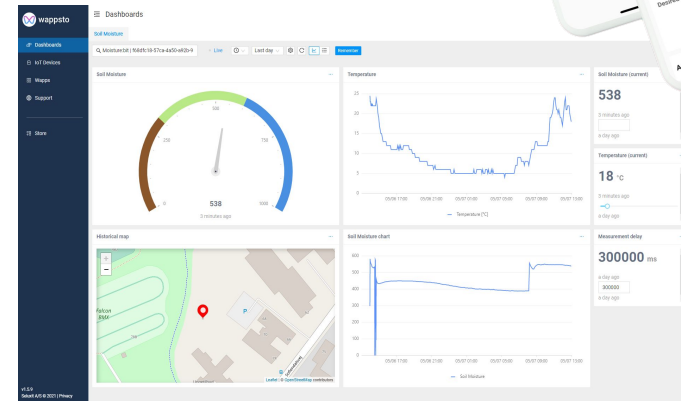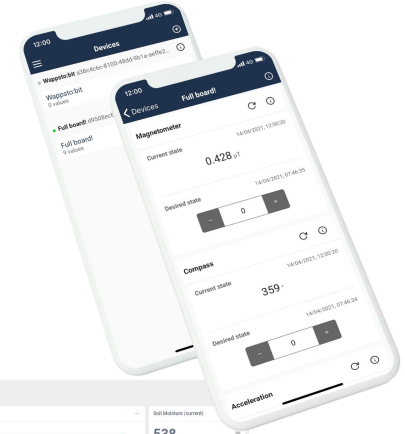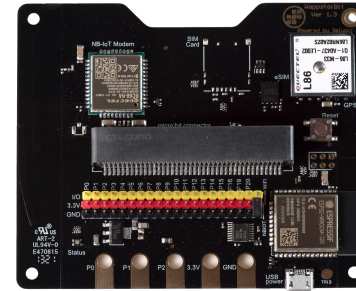
In the box

Wappsto:bit in an antistatic bag

Wappsto:bit NB-IoT+

82 mm

100 mm

13 mm

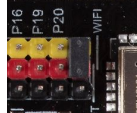Make it Matter | Make it Easy | Make an Impact

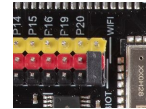seluxit

Using the Wappsto:bit

Changing connectivity mode by moving the jumper:

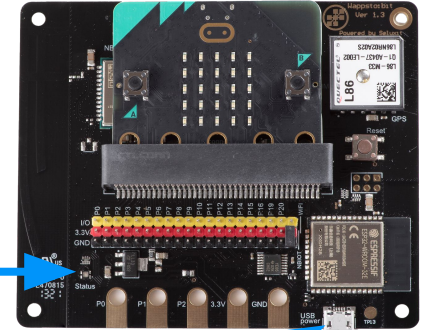Wi-Fi mode
(yellow & red)

NB-IoT mode
(red & black)

LED Indicator

- 🔵⚫ Off
- 🔴 Starting
- 🔵 Bluetooth on
  NB-IoT: Connecting
  Wi-Fi: Ready for Wi-Fi setup
          through Wappsto APP
- 🟢 Connected to Wappsto
- 🟡 Updating firmware
  (only in Wi-Fi mode)

The Wappsto:bit requires a 4.5-5.5V power supply via the Micro USB. You can use a wall socket, your computer, or a power bank.

1 Make sure the micro:bit is powered off before plugging in, for best results, power off Wappsto:bit too

2 Insert the BBC micro:bit firmly, with the LEDS and Buttons facing outwards from the Wappsto:bit

Avoid wet environments and dropping the Wappsto:bit

It is not possible to power the Wappsto:bit through the micro:bit.

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Using External Sensors

Wappsto:bit will work with virtually all 3,3V sensors compatible with the BBC micro:bit.
They will however have to be fitted onto the Wappsto:bit using standard female DuPont jumper Cables.

Pinheaders on the Wappsto:bit correspond 1:1 with the [BBC micro:bit pin layout](#)

Sensor attached on P0 + 3,3V & GND
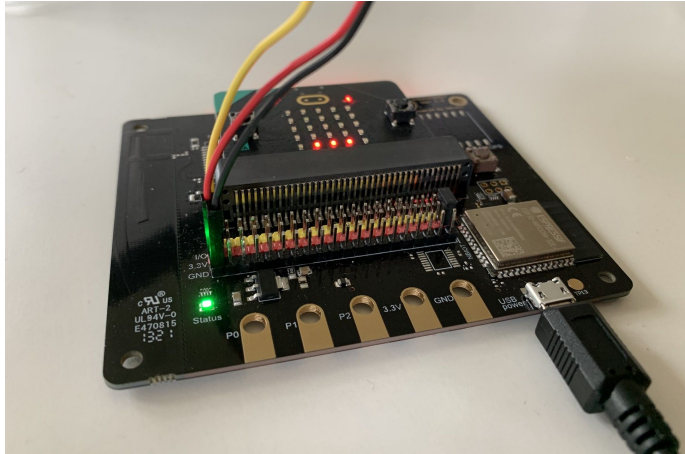
Sensor attached on P19 & P20 (I2C pins) + 3,3V & GND

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Layout and Dimensions

Wappsto:bit NB-IoT+

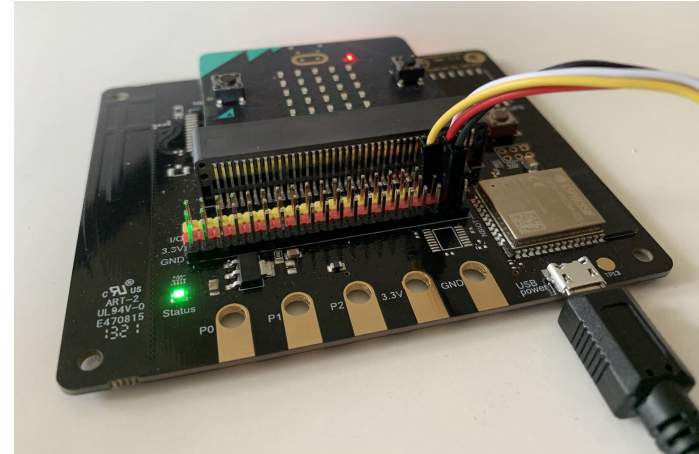Quectel BC66-NA NB-IoT Modem

NB-IoT Antenna

Edge connector for micro:bit

Fully populated pinheaders

LED status indicator

Croc-Clip connections

Quectel L86 GPS

SIM card slot

eSIM Slot

Network settings reset button

Wi-Fi / NB-IoT hard wired jumper

ESP32 Antenna

ESP32 WROOM 32E, Wi-Fi and Bluetooth

Micro USB power supply (4.5-5.5V)
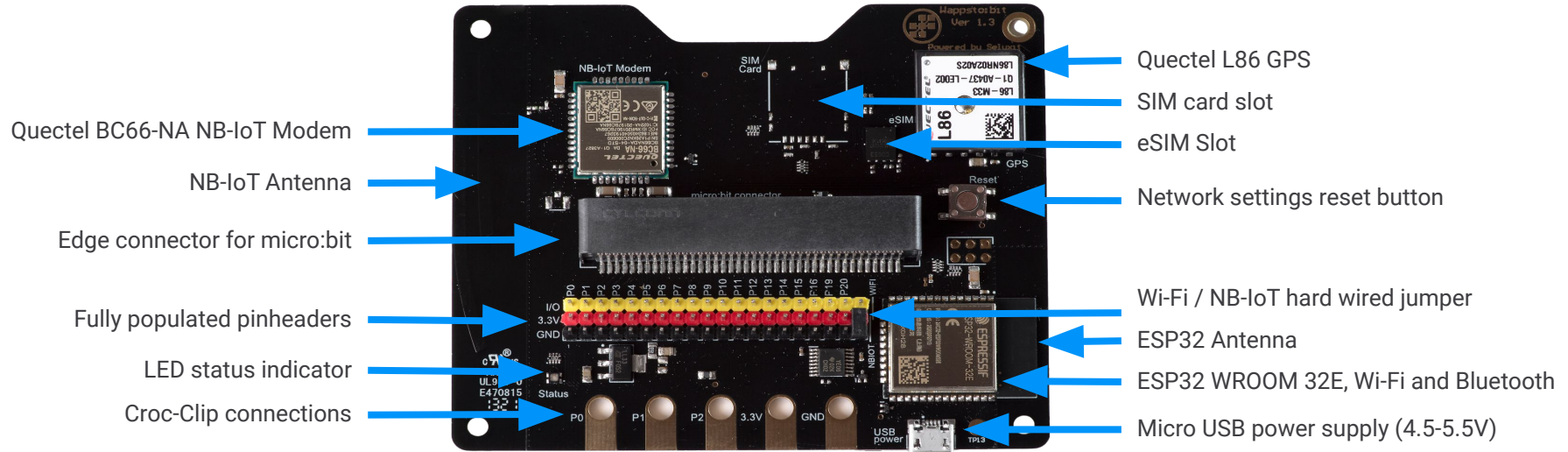
Note: other models feature fewer components

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Hardware Specification

Wappsto:bit Basic	Wappsto:bit NB-IoT	Wappsto:bit NB-IoT+
• Edge-connector for micro:bit • ESP32-WROOM-32E, Wi-Fi and Bluetooth module with built in antenna. • Fully populated pinheaders from micro:bit GPIO pins • Croc-clip connections, micro:bit IO pins 0, 1 and 2, 1x 3.3V output and 1x GND • Status LED, for indication of connection to Wappsto by Seluxit • Button, for resetting network settings. • Micro USB power supply, operating voltage 4.5-5.5V	• Edge-connector for micro:bit • ESP32-WROOM-32E, Wi-Fi and Bluetooth module with built in antenna. • Quectel BC66-NA NB-IoT Modem with sim slot • Antenna optimized for: Narrowband IoT (LTE Cat NB1) Band B3 : Uplink 1710-1785 Mhz, Downlink 1805-1880 MHz Band B20: Uplink 832-862 Mhz, Downlink 791-821 MHz • Fully populated pinheaders from micro:bit GPIO pins • Croc-clip connections, micro:bit IO pins 0, 1 and 2, 1x 3.3V output and 1x GND • Status LED, for indication of connection to Wappsto by Seluxit • Button, for resetting network settings. • Micro USB power supply, operating voltage 4.5-5.5V	• Edge-connector for micro:bit • ESP32-WROOM-32E, Wi-Fi and Bluetooth module with built in antenna. • Quectel BC66-NA NB-IoT Modem with SIM and eSIM slot • Antenna optimized for: Narrowband IoT (LTE Cat NB1) Band B3 : Uplink 1710-1785 Mhz, Downlink 1805-1880 MHz Band B20: Uplink 832-862 Mhz, Downlink 791-821 MHz • Quectel L86 GPS Module • Fully populated pinheaders from micro:bit GPIO pins • Croc-clip connections, micro:bit IO pins 0, 1 and 2, 1x 3.3V output and 1x GND • Status LED, for indication of connection to Wappsto by Seluxit • Button, for resetting network settings. • Micro USB power supply, operating voltage 4.5-5.5V

Product Delivery Terms & Conditions: Product Supply Terms and Conditions, Cloud Terms & Conditions: Cloud Solution Terms and Conditions,
Seluxit IoT Cloud Pricing: Seluxit IoT Cloud Pricing, Seluxit General Privacy Notice: Seluxit Privacy Notice

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Wappsto and Connectivity pricing

For more information visit: www.seluxit.com/Pricing

We've got you covered with a great free plan!

As long as you have less than 10 devices on Wappsto

You will get **1.000.000 measurements** every month that you decide how to distribute between storage and traffic.

If you wish to send a lot of messages, but store them only shortly or vice versa it's all up to you!

What if I run out of measurements?

If you run out of measurements, we'll stop the flow for you.
Then you can either wait until next month for more free measurements, or purchase additional.

If you need more measurements, then you're probably a professional user and will have to pay a subscription fee, depending on your usage.

Make your Wappsto:bit mobile with NB-IoT!

40.000 measurements a month starting at 2,50 EUR.

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Data and Safety

For more information visit: www.seluxit.com/Data

One email to rule it all
When you sign up for free Wappsto services, all you need to share is an email address.

If you wish to upgrade your account, our payment partners will of course need to know a bit more about you.'

Nothing shared without your consent and it's all anonymised

If you wish to engage with other users on Wappsto and perhaps share your data, everything is done using unique identifiers (UUID), meaning your identity will be kept anonymous. And you can always withdraw your sharing consent.

At Seluxit we are serious about data security and Data Ethics
- read more about our data ethics principles on https://www.seluxit.com/data
- read more about your data privacy on https://www.seluxit.com/legal/privacy-notice/

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