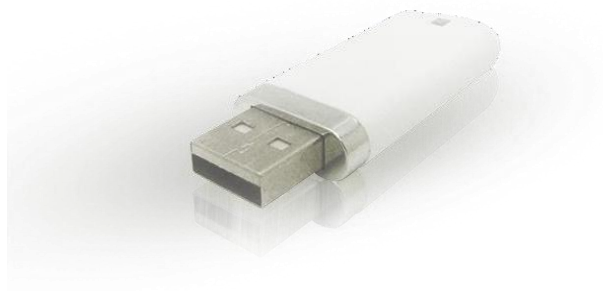


## C2 nRF52840 USB Dongle

**The nRF52840 Dongle (C2-7001) is the preferred hardware to be used with the nRF Connect for Desktop software package to develop and test your nRF-based wireless solutions. The hardware supports all the short range wireless standards available on the nRF52 family of devices**



**V 1.0**

## Revision history

Version	Date	Notes	Contributor (s)	Person of Approve
1.0	2019.07.01	Initial release	Lynn	

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## 1. Product introduction

The nRF52840 Dongle (C2-7001) is the preferred hardware to be used with the nRF Connect for Desktop software package to develop and test your nRF-based wireless solutions. The hardware supports all the short range wireless standards available on the nRF52 family of devices.

The nRF52840 Dongle is a low-cost, versatile USB development dongle for Bluetooth Low Energy, ANT™, 802.15.4, and user-proprietary 2.4 GHz applications using the nRF52840 SoC.

C2-7001 is portable with simple and chic design. With plastic housing, Minew's nRF52840 dongle is cost-effective and reliable.

Key features:

- LEDs for user interaction
- Onboard USB bootloader with buttonless support
- Achieve the application of BLE, RSSI Viewer, etc.
- Powered by USB

### 1.1 Ordering information

Ordering number	Description
205070001	PS1907OR, MS04SF7, nRF52840, QIAA, White housing, industrial package.

## 2. Minimum requirements

Please check the required hardware and software for C2-7001.

### 2.1 Hardware requirements

- PC with a standard type-A USB port

### 2.2 Software requirements

- nRF Connect for Desktop
- Operating system: macOS, Linux, or Windows 7 or later

## 3. Related documentation

In addition to the information in this document, you may need to consult other documents.

### Minew documentation

[nRF52840 module specification](#)

[nRF52840 development kit user guide](#)

[nRF connect](#)

## 4. Physical characteristic

Model	C2-7001
Color	White
Dimension	67 * 20 * 7.5 mm
Power supply	USB
Voltage	5.0 VDC
Install method	Connect through a standard type-A USB port in PC
Working current	12mA
Working temperature	-20°C ~ 60°C

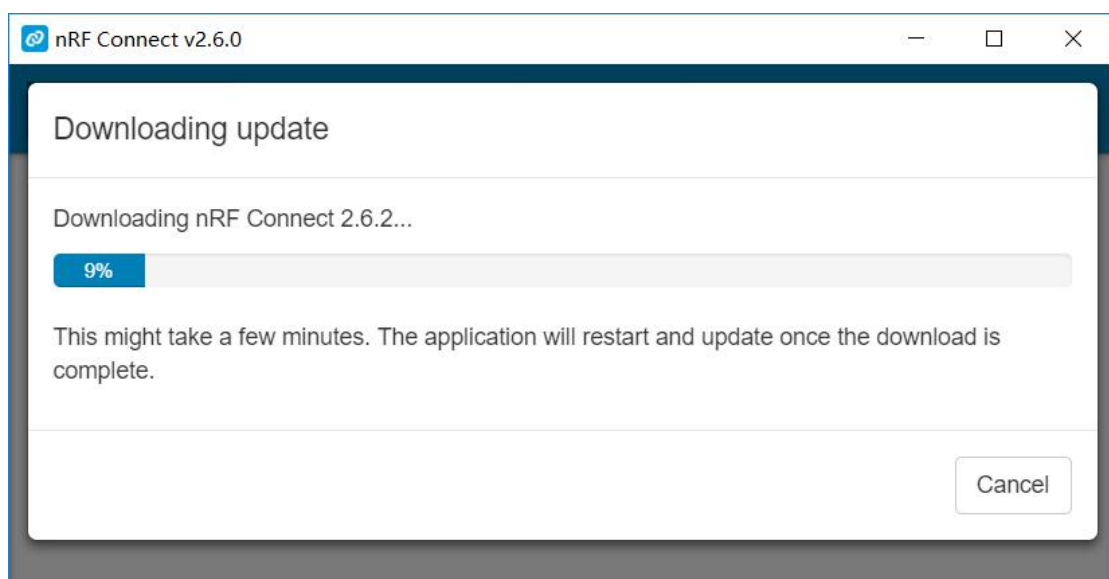
## 5. Operation procedure

### 5.1 Install nRF Connect for PC

Download nRF connect from Nordic Website:

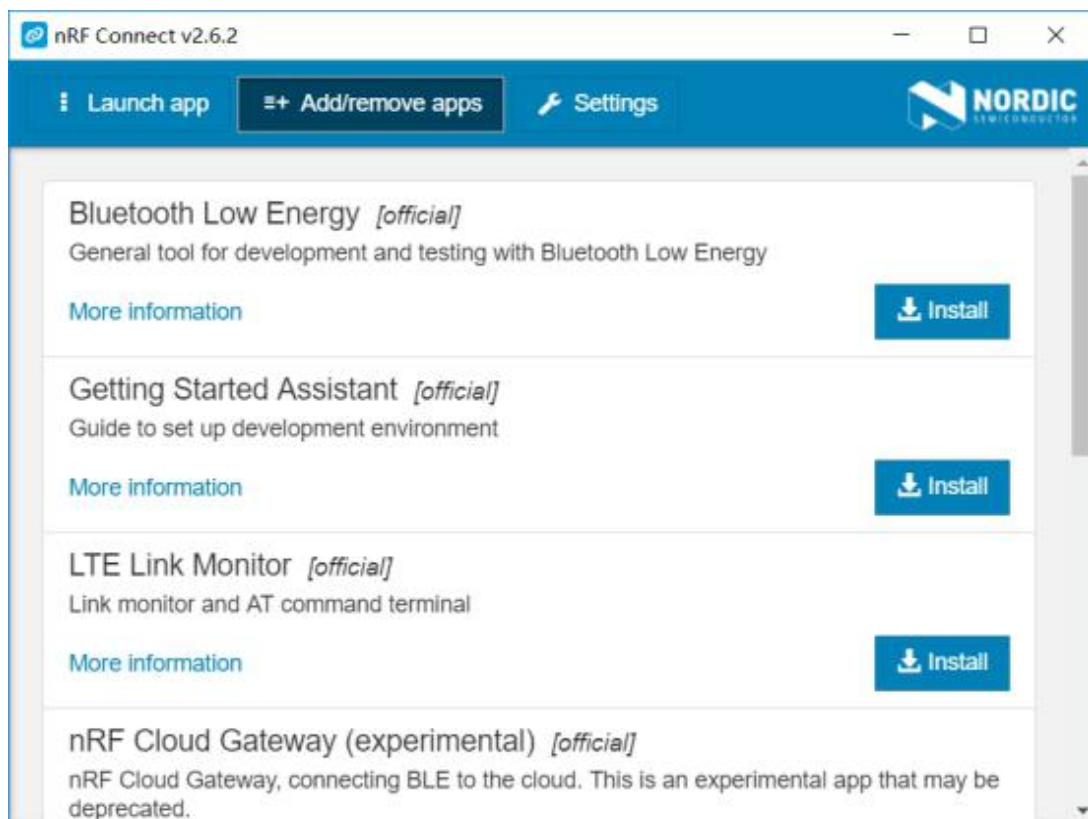
[https://www.nordicsemi.com/Software-and-Tools/Development-Tools/nRF-Connect-for-desktop/Download#infotabs?tdsourcetag=s\\_pctim\\_aiomsg](https://www.nordicsemi.com/Software-and-Tools/Development-Tools/nRF-Connect-for-desktop/Download#infotabs?tdsourcetag=s_pctim_aiomsg)

Or double click the installation package (if the installation package have downloaded already). After the installation finished, the upgrade reminder will show up when open. Then click to upgrade.

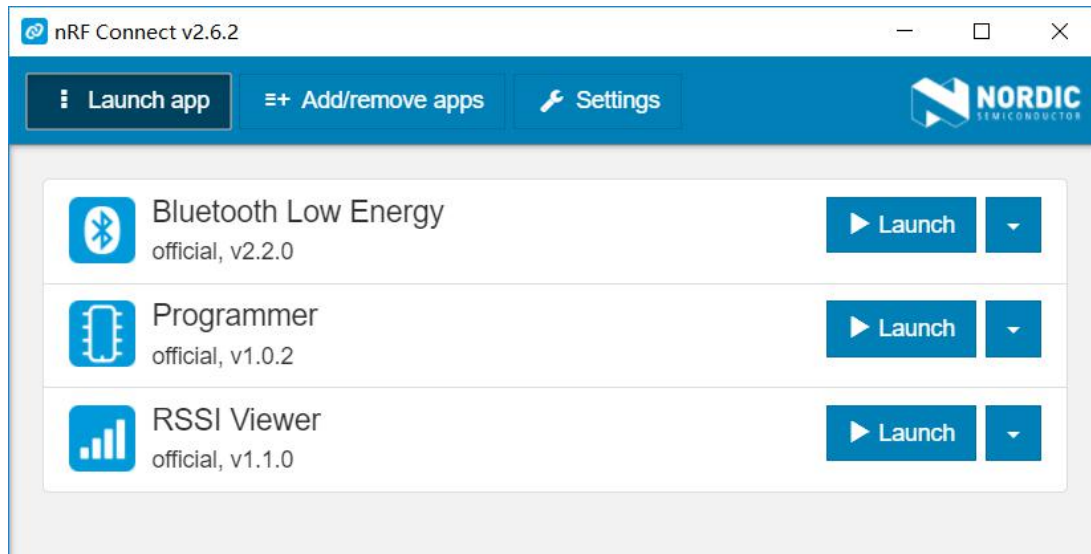


## 5.2 Install the application

1. Open nRF Connect;
2. Click 'Add/remove apps', find the Bluetooth Low energy, RSSI Viewer;
3. Click 'Install'.

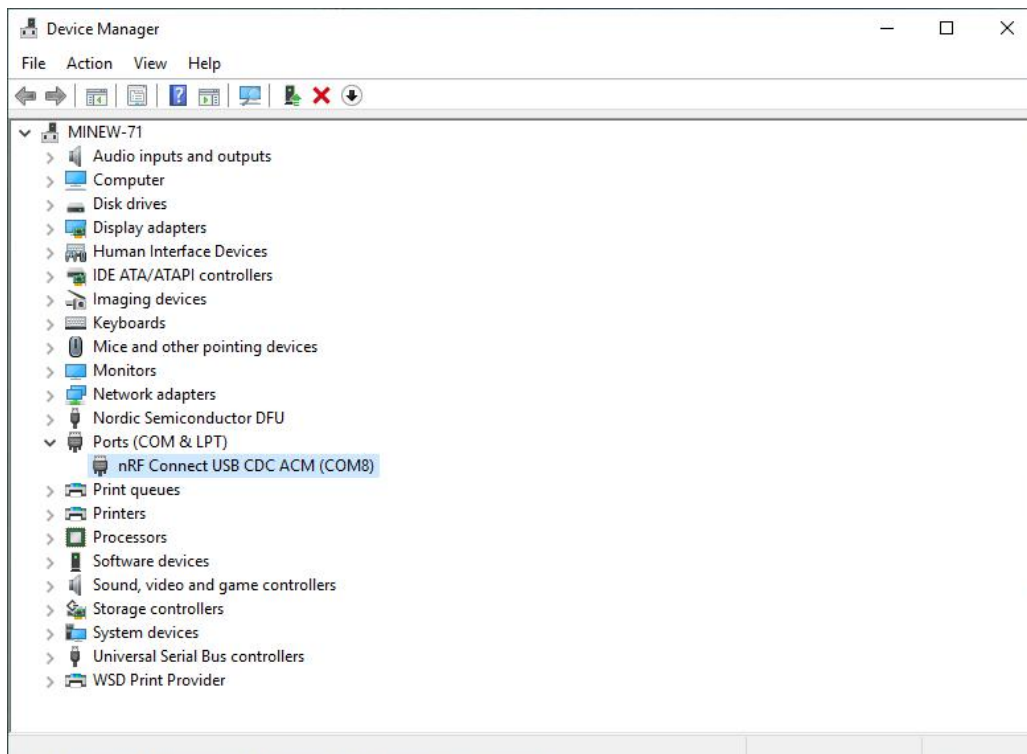


After the installation finished, click 'Launch', then can see the application can work.



### 5.3 Connect nRF52840 dongle

Plunge C2 with firmware preload into USB interface of PC, the Blue Light in the C2 will keep flickering and the PC will install the driver automatically.

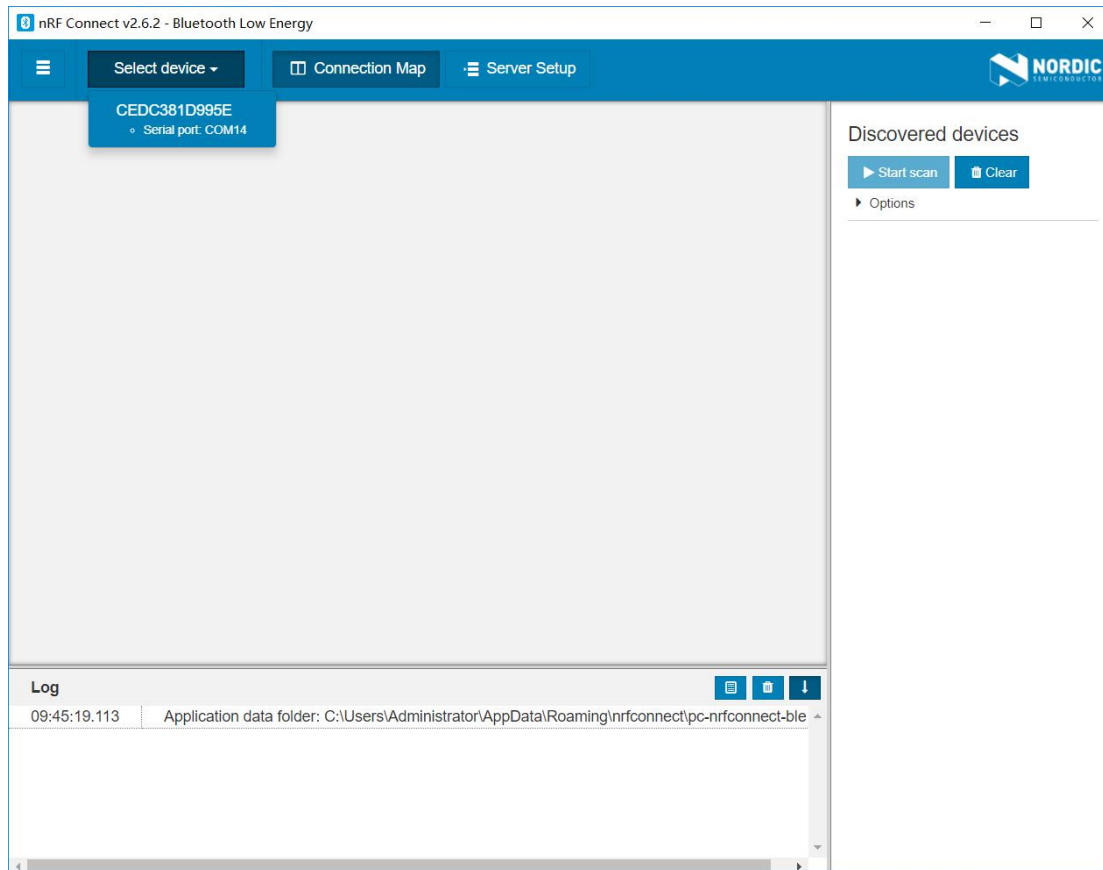




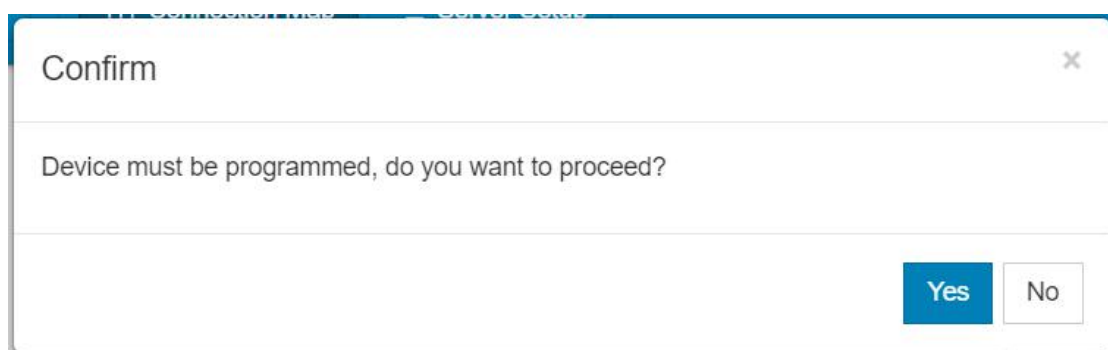
## 5.4 Start testing

### 5.4.1 Test 'Bluetooth Low Energy'

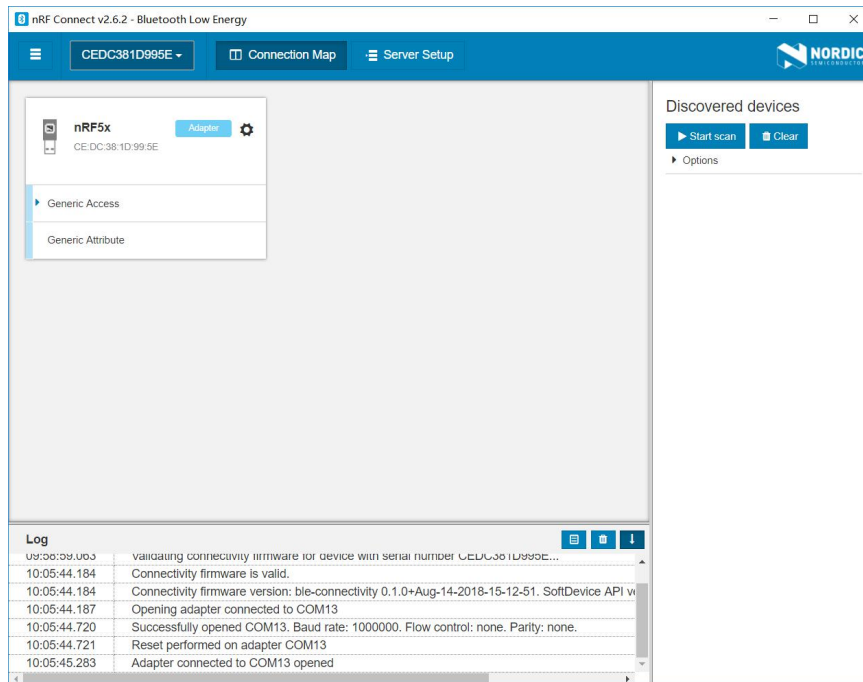
1. Click the 'Launch' Button and then the 'Bluetooth Low Energy' Window will open.
2. Click 'Select device' and then select C2.



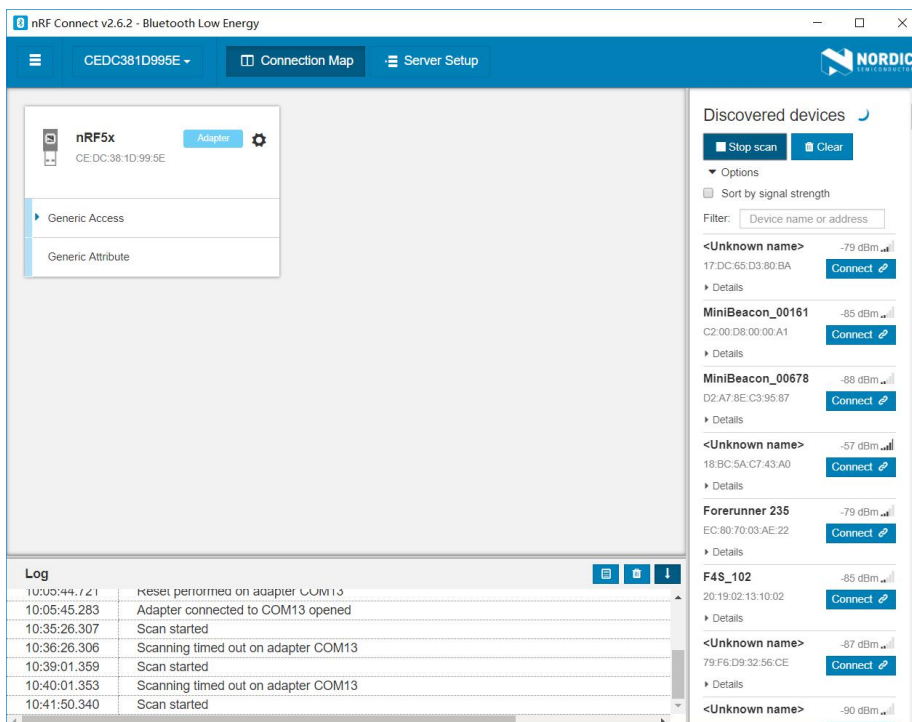
3. Click 'Yes' as a response of 'do you want to proceed'.



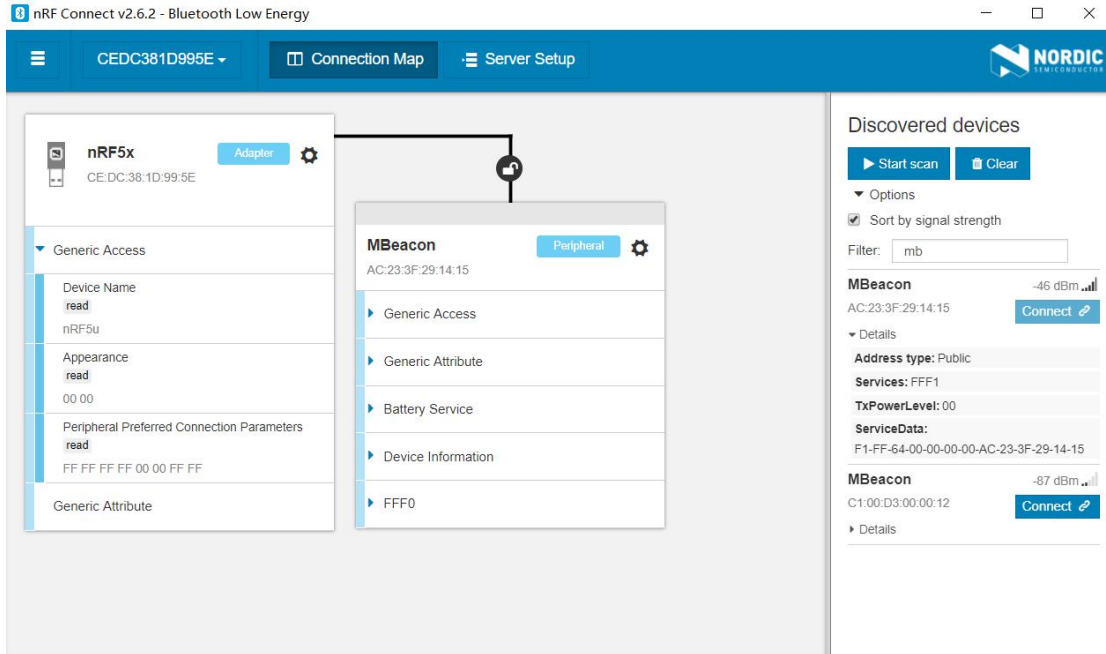
4. After the program have loaded, C2 and MAC address will show up.



Click ' Start scan' to start scan, BLE device scan by C2 will be shown on the below. Click ' Stop scan' to stop scan; Then click 'Clear' to Clear all the BLE device scanned Click.' Sort by signal strength', will order by signal strength; The name of BLE device and MAC address can be filtered by Click 'Filter'.

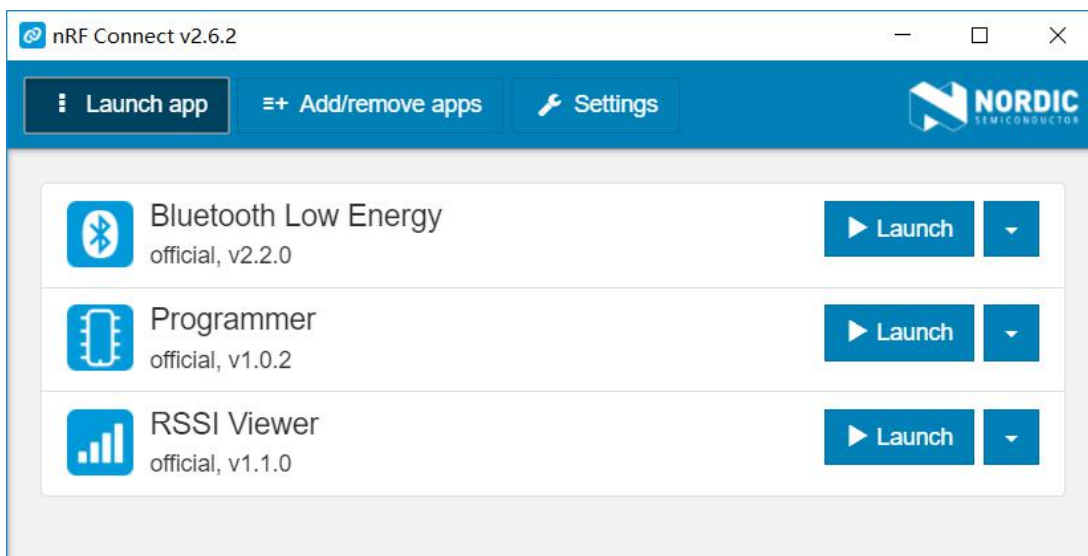


Click 'Details' under the BLE device and check the details of the device;  
Click 'Connect' can connect to the corresponding device.

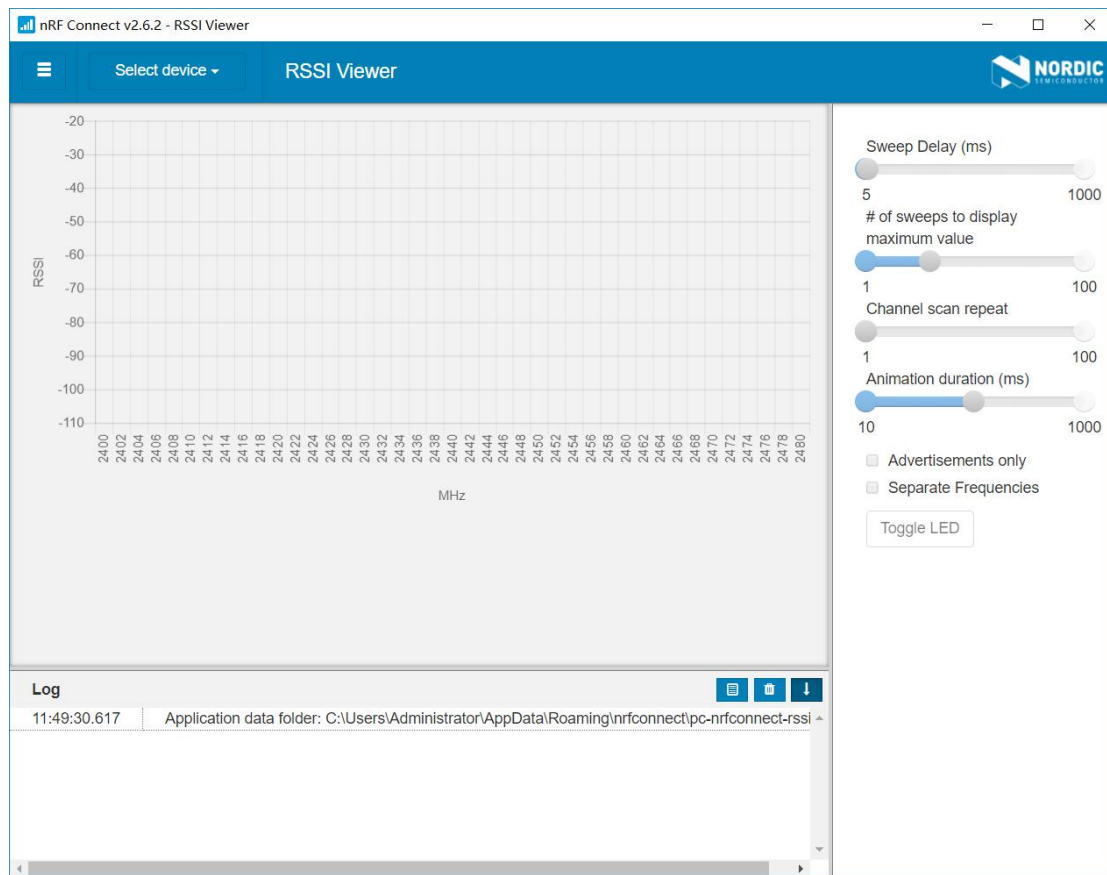


### 5.4.2 Test 'RSSI Viewer'

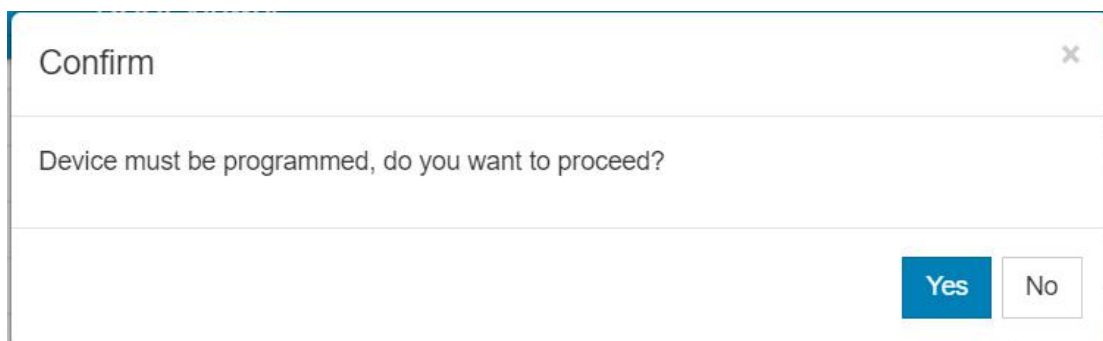
1. Click 'Launch', the RSSI Viewer window will be open.



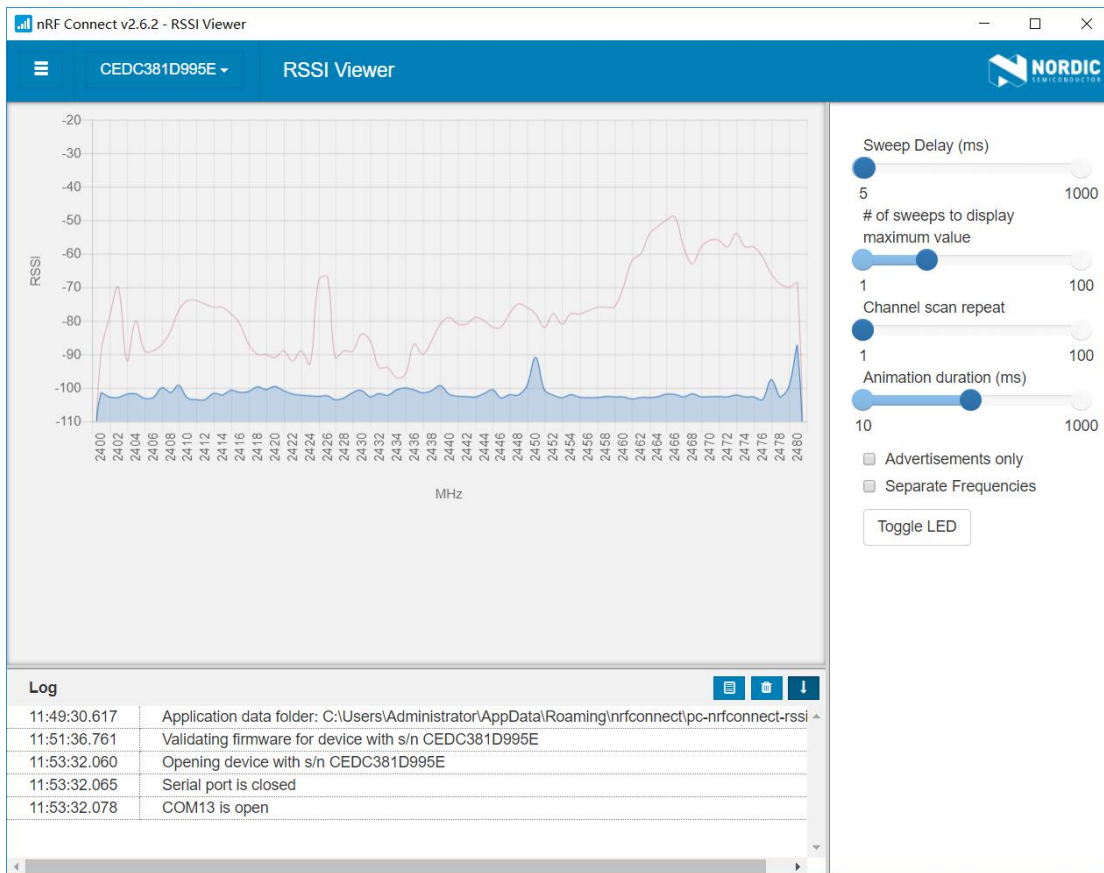
2. Click 'Select device' to select the dongle device.



3. Click 'Yes' to confirm the firmware programming.



4. After the program have loaded, the value of RSSI in different frequency can be tested. The result can be filtered using the right options.



## 6. Package information

Package information	Inner case	Outer box (Carton)
Picture		
Quantity	40Pcs	400pcs
Net weight	264g	2.64kg
Gross weight	500g	5.5kg
Dimension	30.5*11*7.5cm	32*23.5*4.cm

## 7. Disclaimer

The factory has passed the ISO9001 quality management system, ISO14001 environmental management system and OHS18001 occupational health and safety assessment . Each product has been rigorously tested (transmission power test, sensitivity test, power consumption test, stability test, aging test, etc.).

\* NOTICES:

- (1) The Bluetooth trade mark is owned by the Bluetooth SIG Inc. USA.
- (2) All other trademarks listed herein are owned by their respective owners.
- (3) All specifications are subject to change without notice.
- (4) Please do not use this specification for produce, sell or illegal purpose without Minew's authorization.
- (5) Minew have right to interpret all the items above.

## 8. Contact information

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China