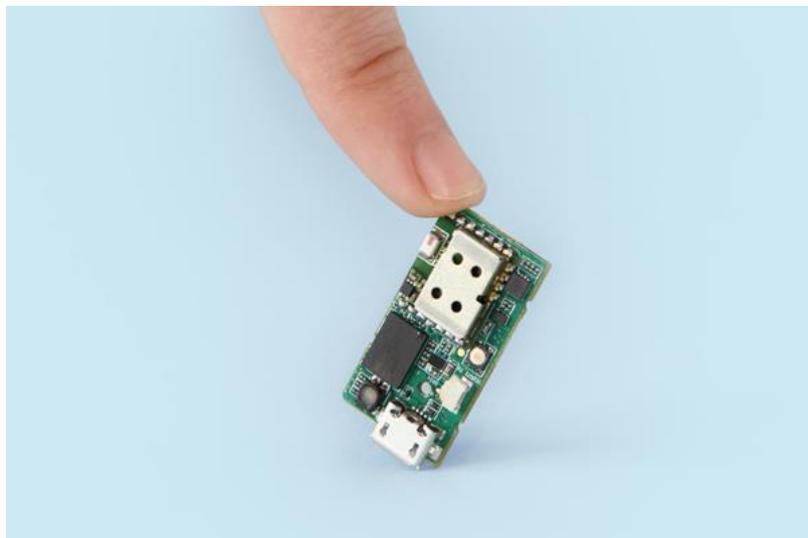


# LPMS-B2 Series

## Quick Start Guide ver. 1.3



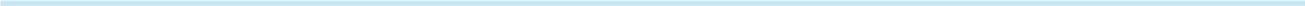
LP-RESEARCH Inc.  
<http://www.lp-research.com>

## Version History

Date	Revision	Changes
2016-03-01	1.0	- Initial release.
2016-07-27	1.1	- Correction of some parameters of LPMS-B2. - Add the parameter tables of pressure sensor. - Add the LED status table.
2018-03-27	1.2	- Updated parameters table of LPMS-B2
2020-03-08	1.3	- Move the hardware specifications into hardware manual.

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## I. Introduction

Welcome to the LP-RESEARCH Motion Sensor LPMS-B2 series quick start guide.

In this documentation we will explain everything you need to know to quickly set up the LPMS-B2 hardware, install its software and get started with sensor data acquisition. We have put a lot of effort into making the LPMS-B2 a great product, but we are always eager to improve and work on new developments. If you have any further questions or comments regarding this documentation please feel free to contact us anytime.

For more information on the LPMS-B2 or other product series, please refer to datasheets and user manuals, available from the LP-RESEARCH website at the following address: <http://www.lp-research.com>.



## II. Operation

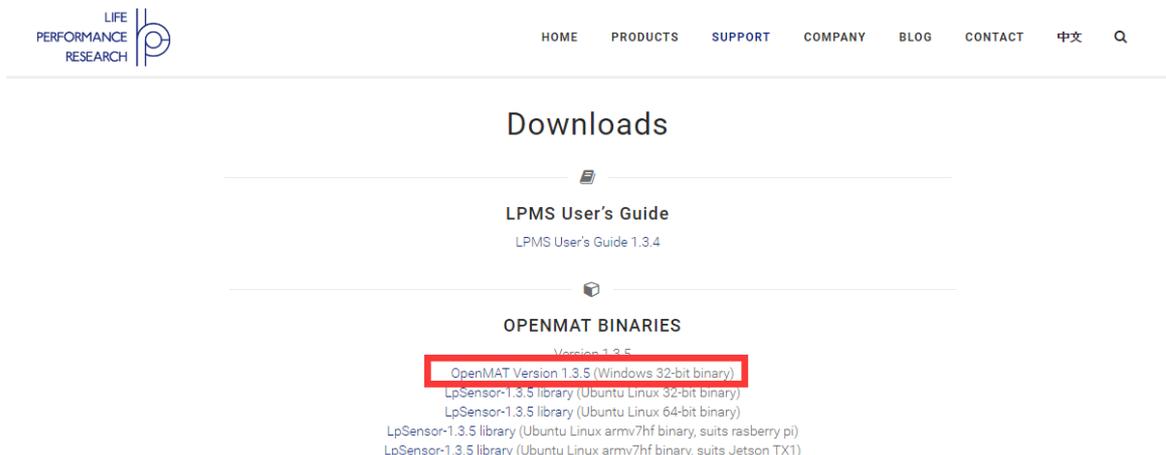
### Power on

On the top side of LPMS-B2 there is a button used for switching on the sensor. If there is no connection request from the host system in 3 seconds after the sensor is powered on, the LED will start to blink in an interval of 1 second, which means the sensor is at a standby mode.

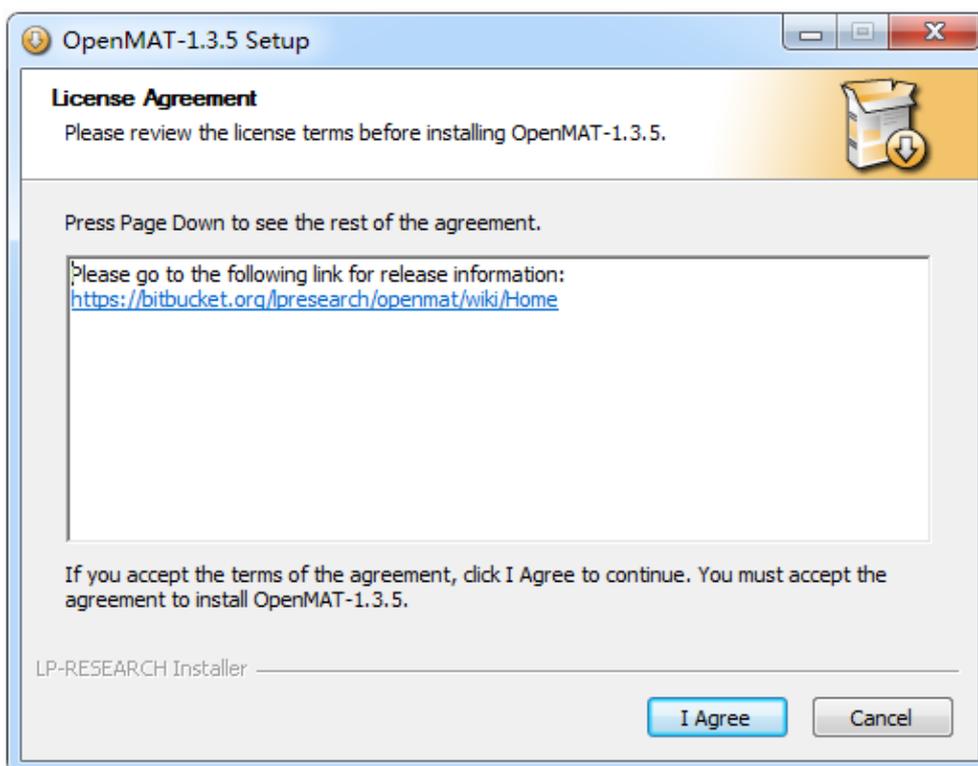
### OpenMAT Software Installation

We offer windows OS based software called LpmsControl for users to easily manipulate the LPMS-B2 sensor. The LpmsControl software is a sub program of OpenMAT software. Please choose a correct version of OpenMAT software from our homepage based on the operation system specification. The followings shows an example of installing the OpenMAT software under Windows 7 32bit system.

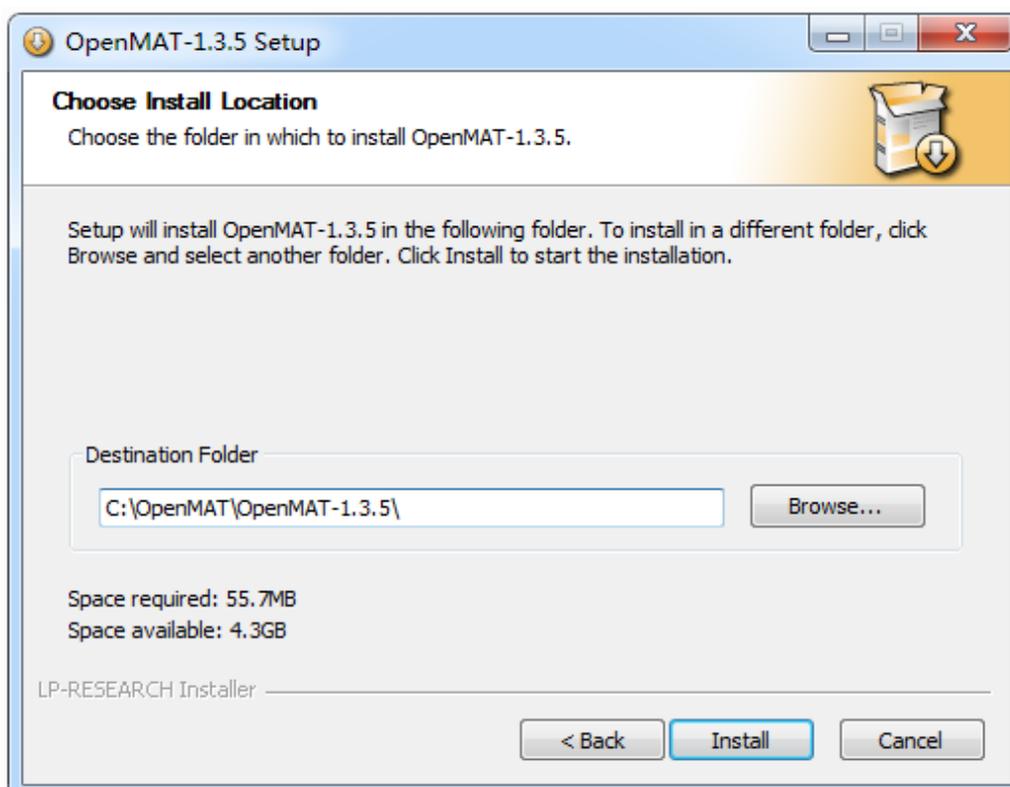
- 1) Go to: <http://www.lp-research.com/support/>, and download the latest version of OpenMAT for the sensor, like OpenMAT Version 1.3.5 (Windows 32-bit binary) showed as below.



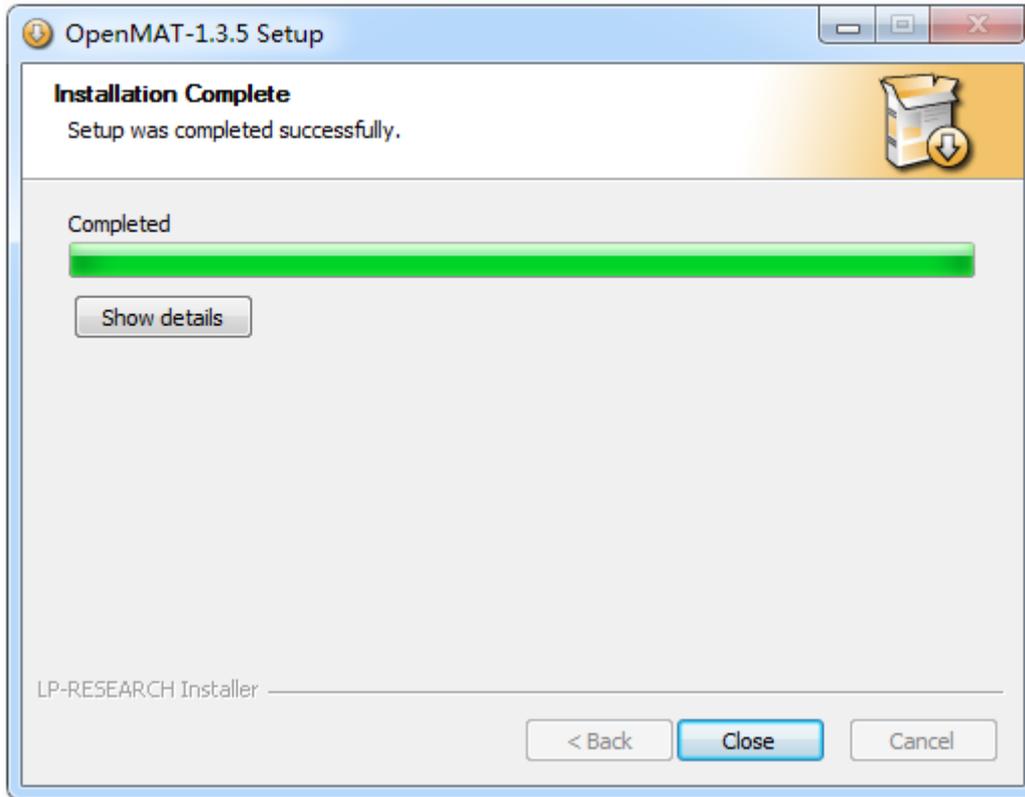
- 2) Run the installer after the download process is finished, and push the "I Agree" button for the next step.



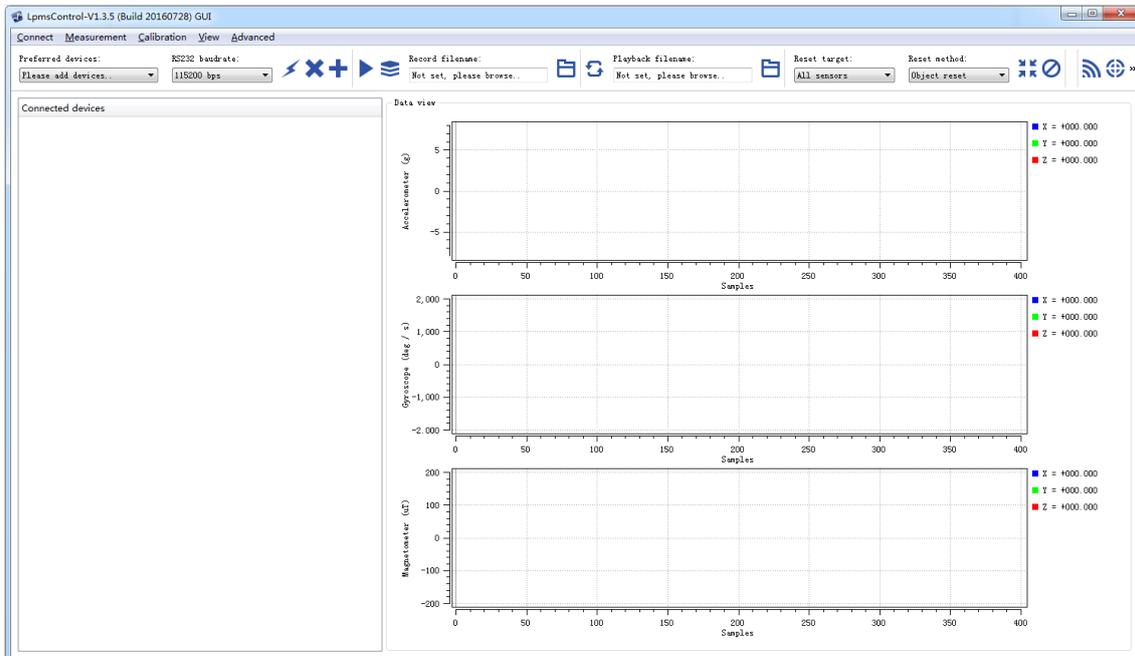
- 3) Push the "Browse" button to select the installation path of the program, and then push "Install" to start the installation process.



4) Push the "Close" button to complete the installation.



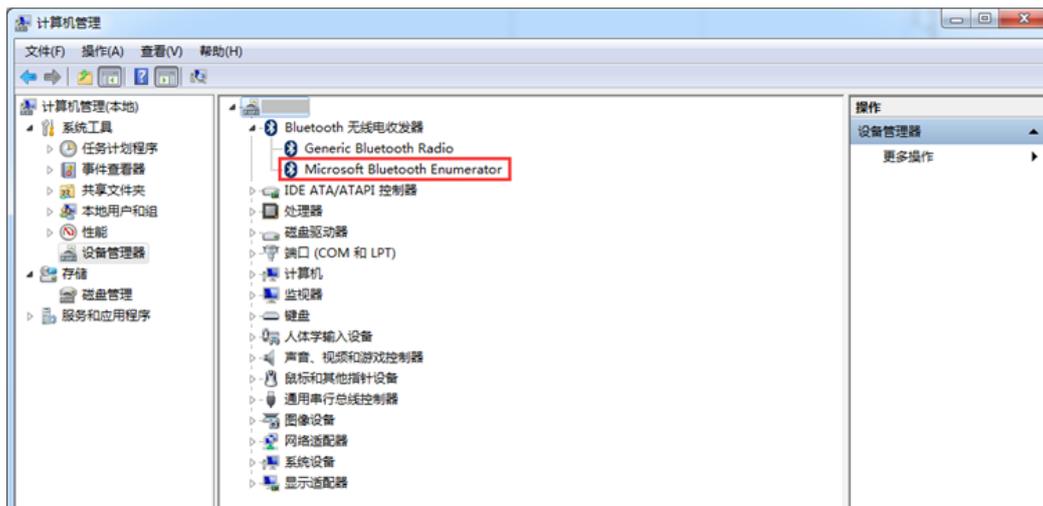
To run the LpmsControl software from the start menu of your windows system, you can see the following interface.



## Connection with PC

The communication between LPMS-B2 sensor and a windows OS PC is based on Bluetooth technology. Therefore, please make sure your system has an embedded Bluetooth (2.0) receiver or an external Bluetooth USB dongle for device pairing and data exchange.

**Note: Only Microsoft Bluetooth driver is supported by our software.** Please confirm If you have installed the correct driver for your Bluetooth receiver from the device manager of windows system, seen as the image below.

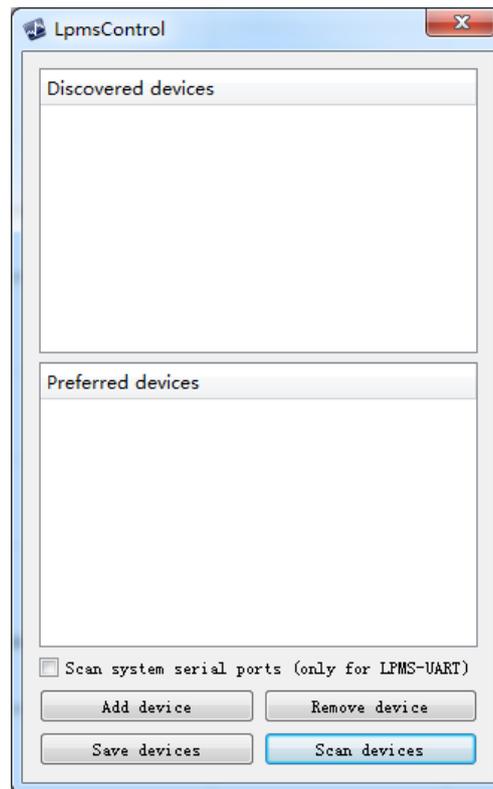


Please follow the instructions below to complete the remaining steps.

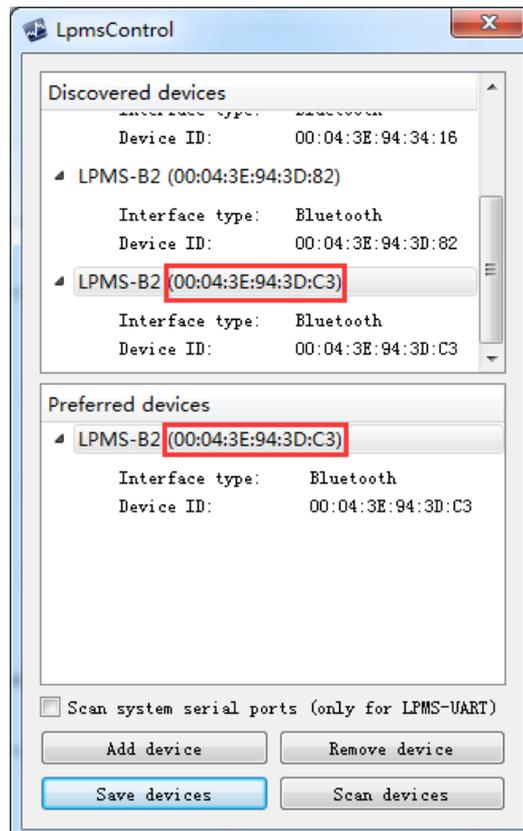
- 1) To switch on the sensor.
- 2) To select the "Add/remove sensor" under "Connect" menu or click the "+" button on toolbar.



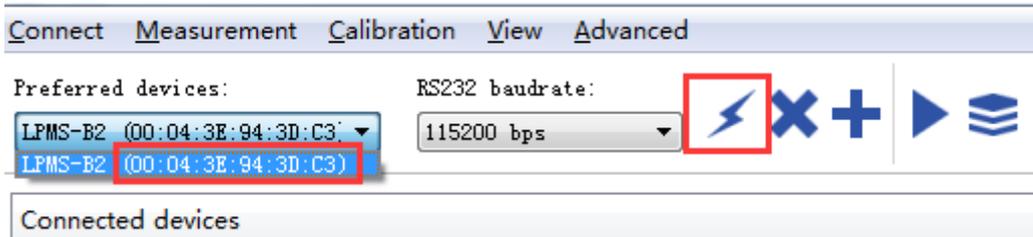
The "add device" window will pop out, as following.



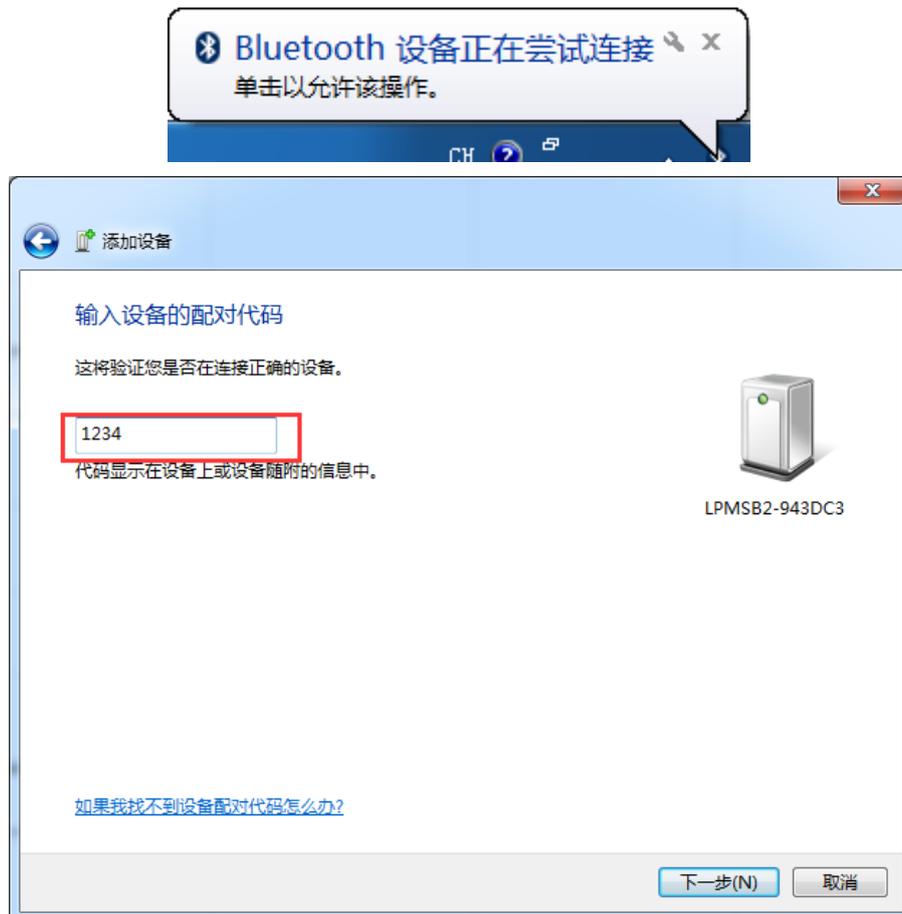
- 3) To click the "Scan devices" button and start the device discovery process. Please wait until the process is done.
- 4) To select the target sensor ID from the "Discovered devices" list, for example, "LPMS-B2 (00:04:3E:94:3D:C3)" in the following image.



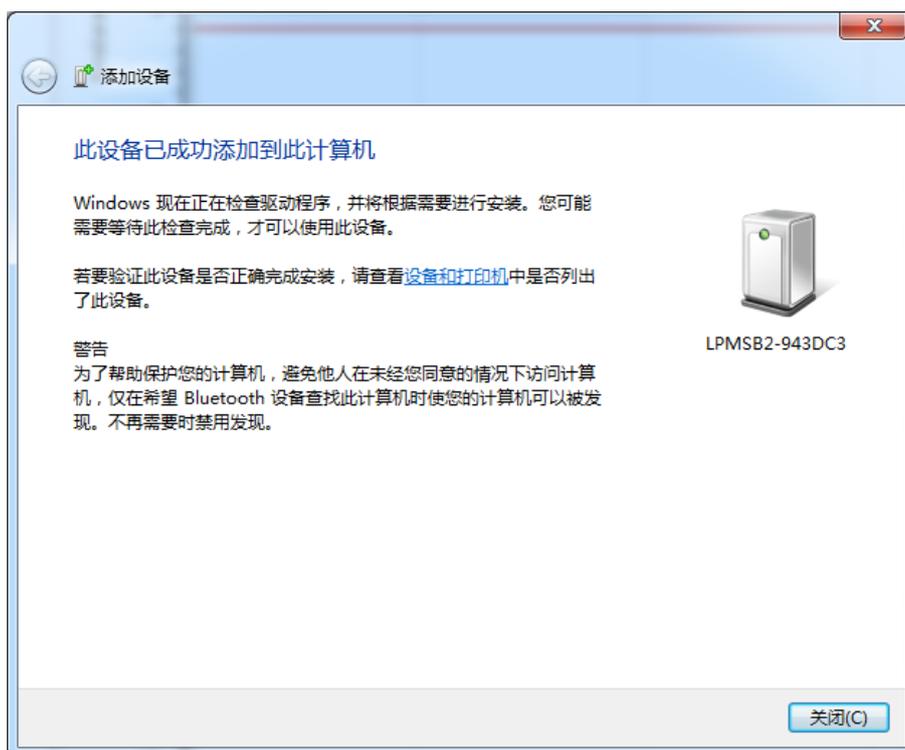
- 5) To add the selected sensor to "Preferred devices" list by clicking the "Add device" button.
- 6) To click the "Save devices" button to save the preferred devices list, and return to main interface of LpmsControl.
- 7) To select the target sensor ID from the Preferred devices list, and click Connect function under "Connect" menu or click the lightning button on toolbar to connect the sensor.



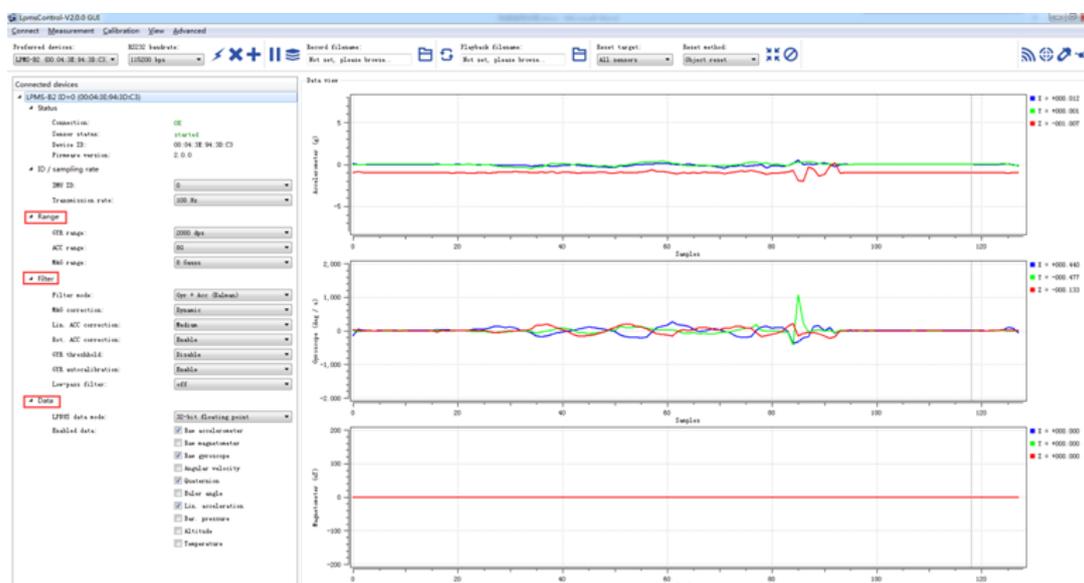
During this process, there might be a pop out message from the taskbar of windows to ask for the permission of Bluetooth pairing. Please enter "1234" as the pairing code.



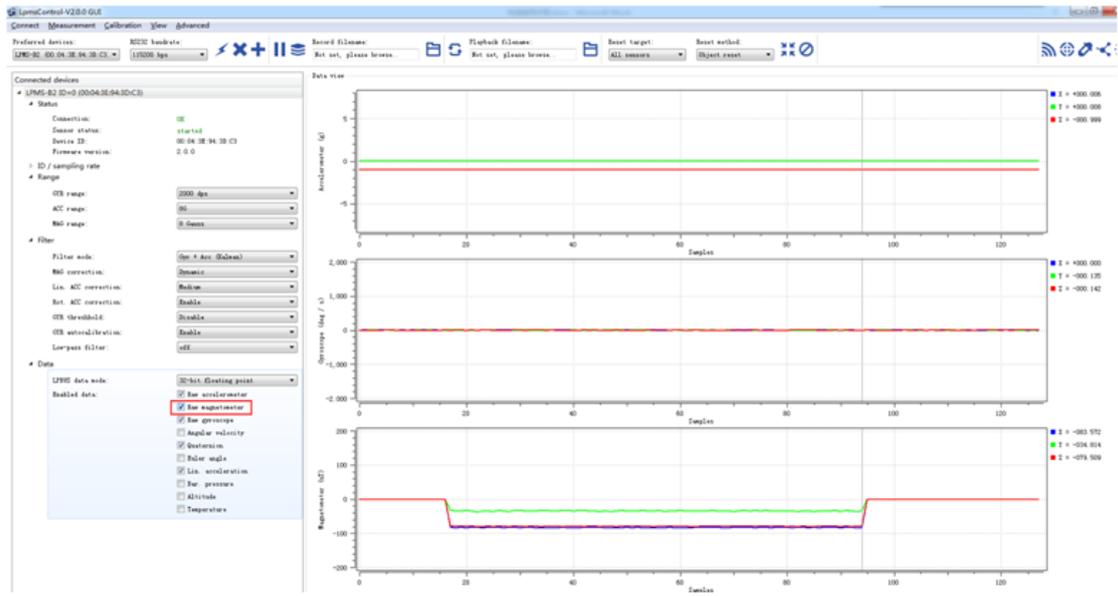
If the pairing is successful, the following window will show up.



After completing all the steps above, the LPMS-B2 should have been connecting with windows system. Users can check all the data visualization and parameter settings of the sensor from LpmsControl.



On the left side of the main interface of LpmsControl, users can change the sensor settings, like measurement range, filter modes, data updating rate, etc. Moreover, the types of output data can be modified by checking or unchecking the check box of each parameter. For example, in the following image the "raw magnetometer" is checked so that the acquisition of magnetic data is enabled.



For more information, please refer to our product datasheets and product manuals.

