



**Edu-Logger USB
Module Guide
900-213**



Edu-Logger USB module 900-213

The Edu-Logger USB module is the easiest way to connect the entire Edu-Logger sensor line and any Edu-Logger accessory modules to any computer that has a USB port.

The USB module acts as the bridge between the sensor's hardware and your computer's hardware by both translating incoming data from the sensors and by providing power to the sensors.

Connection to computers is done through a standard USB to mini USB connection cable which is included in the package. The only requirement is that your computer has a USB port.

Using the Edu-Logger USB module:

As with all Edu-Logger devices, using the USB module is very quick and easy.

Materials needed:

- USB module (900-213)
- Any Edu-Logger sensor
- Free Edu-Logger software
Available at Edu-Logger.com

USB usage with sensors:

Using the USB module with any Edu-Logger sensors (up to 50) plugged directly into it is the easiest and most straightforward way to collect data.

1. Download the completely free Edu-Logger software from www.edulab.com
2. Connect the micro USB end of the included cable into the USB module.
3. Connect the regular USB end of the included cable into any open USB port on the computer of which you will be using.
4. Next, connect any Edu-Logger sensors (up to 50) which you desire to use for this experiment directly into the left side of the USB module. Note: No cables are required to plug modules and sensors together. They plug directly into each other.
5. Open the Edu-Logger local software (i.e the Edu-Logger logo on your desktop), it will run through your default internet browser (Chrome, Mozilla, Internet Explorer, Safari, etc.) though you don't need to have an active internet connection.
6. The software will automatically detect all connected sensors. If you wish to connect more sensors you can simply click the "Search For Sensors" button at any time.
7. Your sensors are now connected and you can begin collecting data!

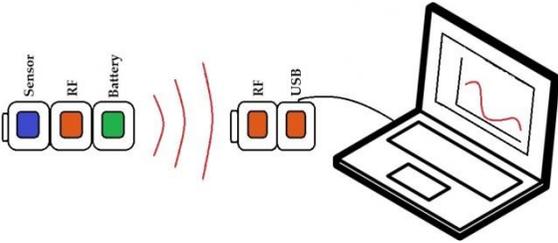
USB with RF modules:

Using Edu-Logger RF modules with a USB module and sensors provides a much more flexible system in which students can collect data from anywhere within 20 meters of their lab bench while wirelessly streaming data in realtime to the Edu-Logger software at their workstation.

Once you have paired two RF communication modules to the same RF ID number (1 through 9) you can begin connecting Edu-Logger modules and sensors together. Again it may be easiest to imagine the RF communication modules as a long cable between the sensor and the USB module.

8. Connect the USB module into a computer using the included USB to mini USB cable.
9. Connect one of the paired RF modules to the left side of the USB module.
10. Separately, connect the second RF module into the left side of a charged battery module. Note: press and hold the button on the front of the battery module: if a light comes on, than the battery has sufficient power. If no light comes on, than you must charge the battery some more.
11. Connect whichever sensors you wish to use into the left side of the second RF module (which is connected into the battery). Note: You can conduct experiments with up to 5 Edu-Logger sensors using the RF modules.
12. Open the Edu-Logger local software (i.e the Edu-Logger logo on your desktop) and automatically begin searching for sensors.
13. Once your sensors are detected you are ready to begin collecting data wirelessly!

For reference, the image below demonstrates roughly how your setup should appear.



USB at off-line mode:

Using the USB module with several Edu-Logger sensors plugged directly into it can also be used with off-line mode.

The USB module and the Edu-Logger software are used to determine the off-line experiment parameters.

After running the sensors off-line with battery module the USB module and the Edu-Logger software are used to upload the experiments data from the sensors to the computer and examination and saving.

The experiments' data is saved in the sensors internal flash memory up to 5 experiments.

The USB module is used as the power source for the sensors (instead of the battery module) and enables to start the off-line experiment at once for all of the connected sensors.

This for some complex experiments where more than one sensor has a trigger level and you want that the sensors' data will be synchronized.

Included in package:

- 900-213 module
- USB to micro USB cable.

Maintenance and storage:

- Never submerge the Edu-Logger plastic body in any liquid.
- After use, gently wipe away any foreign material from the USB module
- Store in a box at room temperature out of direct sunlight.

Warranty:

We promise to deliver our sensor free of defects in materials and workmanship for a period of 3 years from the date of purchase. Our warranty does not cover damage of the product caused by improper use, abuse, or incorrect storage. Sensors with a shelf life such as ion selective probes have a warranty of 1 year. Should you need to act upon the warranty please contact your distributor. Your sensor will be repaired or replaced.

Thank you for using Edu-Logger!

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