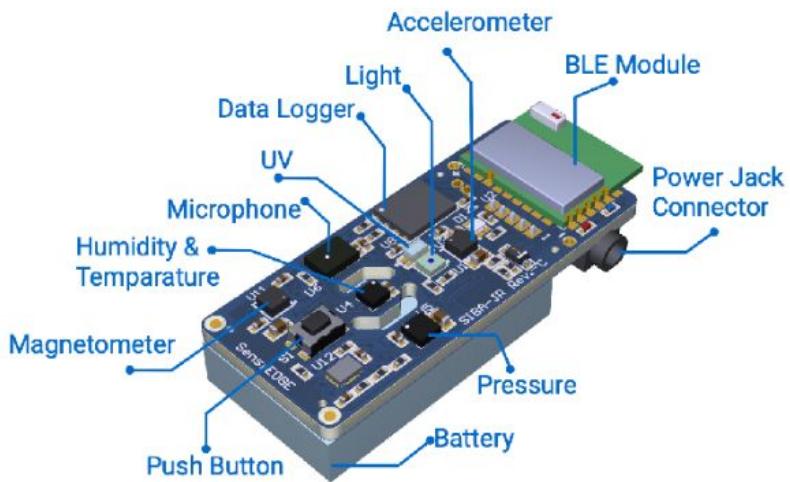


SensiBLE2.0 is a portable module (with dimensions 43 x 17 mm) powered by a rechargeable Li-Ion battery. With sensors, such as ambient light sensor, UV sensor, pressure sensor, relative humidity sensor, microphone - SensiBLE2.0 can be used for a variety of purposes such as workplace exposure assessment, noise level checking, compliance with climatic conditions in greenhouses and others. The presence of an accelerometer and magnetometer allows you to use the device as a digital compass, pedometer or, for example, measure the vibration level.



The heart of the device is the module, produced by STMicroelectronics - SPBTLE-1S. This is a certified module that includes the BLE v4.2 stack and the low-power ARM® Cortex®-M0 32-bit core. It has been designed to leverage the BlueNRG-1 integrated DC-DC step-down converter in order to achieve the best power consumption in active mode. This combination allows you to get a pretty cheap device with BLE support. The module runs at 32MHz, which is quite enough for most tasks. The module has 160 KB of flash and 24 KB of embedded RAM with data retention.

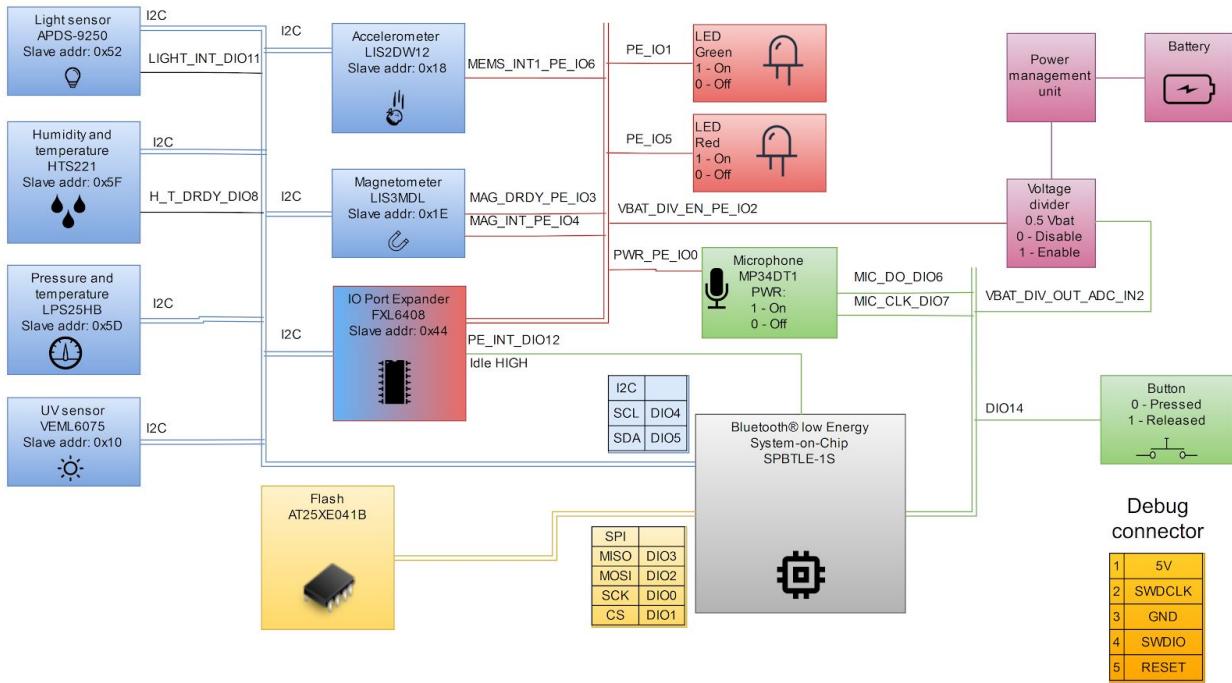
SensiBLE2.0 is fully compatible with “ST BLE Sensor” APP (available for Android and iOS). This program makes it easy to read sensors values and send them to Cloud. Additionally, you can use the SensiEDGE application for Windows - SensiBLEWindows. The source codes of both programs can be found on the GitHub. The license allows you to edit the source codes based on your needs.

One more convenient feature of SensiBLE2.0 is the firmware over the air update. This gives a more flexible update of the firmware of the SensiBLE2.0 without the need to use the SED-Base programmer. For example, if you have ten SensiBLE2.0, after debugging the program on one module, with the help of the SED-Base programmer, on the other 9 devices it can be installed through BLE.

SensiBLE2.0 can act as a Data Logger, by configuring an external FLASH memory located on the board to store sensor measures if a BLE connection is lost. When the connection is restored - transfer all the data that was received during this time. The only thing to note is that the external Flash Memory is used when upgrading the SensiBLE2.0 firmware and for storing

the calibration coefficients of the magnetometer. Therefore, before upgrading the firmware through OTA, make sure that all the data you have written to the external storage, starting at 0x00 and ending with 0x0247FF, has been transmitted and processed.

## SensiBLE-2.0



To know more information, please visit <https://www.sensiedge.com/sensible>.