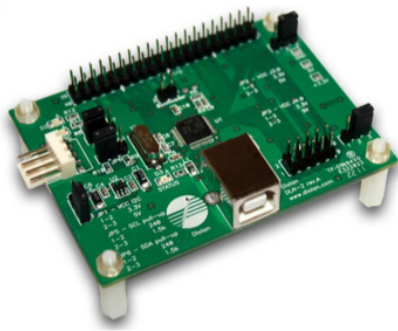


## Posifa Sensor I<sup>2</sup>C Evaluation Kit

The Posifa sensor I<sup>2</sup>C evaluation kit enables rapid I<sup>2</sup>C communication setup from a PC to a Posifa sensor that supports I<sup>2</sup>C. Users can then view real-time sensor output on a PC and also log the data for analysis at a later time. This kit is compatible with all Posifa sensors except for the PMF series.



The kit consists of an I<sup>2</sup>C-to-USB adapter board and software programs for PCs running Windows 10.

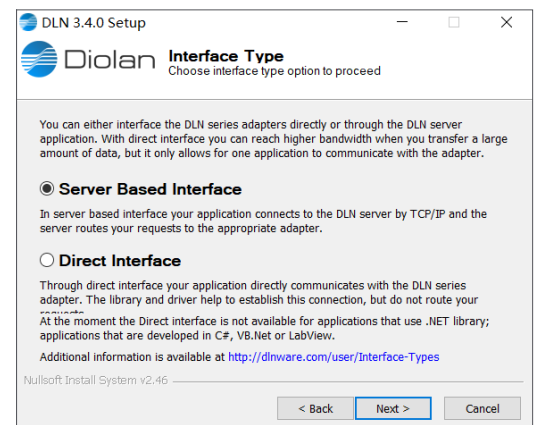
The I<sup>2</sup>C-to-USB adapter is made by Diolan and is available for purchase at <https://diolan.com/dln-2>

Please note that the “MS Windows Setup Package” must be installed on your PC before the DLN-2 adapter can be used. You can find the link to the download on the “DOCUMENTATION AND DOWNLOADS” tab of the DLN-2 product page.

When installing the MS Windows Setup Package, please make sure you select “Server-Based Interface,” as illustrated in the screen shot.

### Jumper configuration of the I<sup>2</sup>C-to-USB adapter DLN-2

- JP1(Vcc I<sup>2</sup>C): Select 5 V or 3.3 V based on the Posifa sensor’s supply requirements. Please refer to the datasheet of the Posifa sensor under evaluation
- JP5 (SCL pull-up): 1.5 K
- JP6 (SDA pull-up): 1.5 K



#### Installation of the “Posifa Sensor Diagnostics” program

- Download the PC program from this link: <https://drive.google.com/file/d/1kSM7-KeJLUOBlco3XI5u6nlroG8IIkKL/view?usp=sharing>
- Unzip the package into a local folder. Keep all files in the same folder. Do not edit or modify any files
- Open the single “.exe” file in the folder (see screen shot)

dln.net.dll	2020/3/5 14:33	195 KB
FTD2XX_NET.dll	2020/3/5 14:33	72 KB
FTD2XX_NET	2020/3/5 14:33	108 KB
libMPSSE.dll	2020/3/5 14:33	45 KB
LiveCharts.dll	2020/3/5 14:33	149 KB
LiveCharts.pdb	2020/3/5 14:33	356 KB
LiveCharts.Wpf.dll	2020/3/5 14:33	213 KB
LiveCharts.Wpf.pdb	2020/3/5 14:33	488 KB
LiveCharts.Wpf	2020/3/5 14:33	172 KB
LiveCharts	2020/3/5 14:33	216 KB
posifa	2020/3/5 14:33	1 KB
Wpf.CartesianChart.ConstantChanges	2020/3/5 14:33	126 KB
Wpf.CartesianChart.ConstantChanges.exe.config	2020/3/5 14:33	1 KB
Wpf.CartesianChart.ConstantChanges.pdb	2020/3/5 14:33	120 KB

#### Posifa Sensor Diagnostics program UI

- “Settings”: Select “Raw” for reading sensor raw data, and “Calibrated” for reading sensor data
- “Sampling Frequency”: Specify the frequency of I<sup>2</sup>C communication to the Posifa sensor
- “Get Data”: Click on this button to start communication with the Posifa sensor and to display sensor output
- “Save Data”: Click on this button to save sensor output into a local text file
- “Filter”: Select using moving average to display and store sensor output
- “Packets”: Display the I<sup>2</sup>C package in hex format
- “First”: Display the first data piece in the I<sup>2</sup>C package in decimal format
- “Second”: Display the second data piece in the I<sup>2</sup>C package in decimal format

