

BROCHURE SDK/API WINDOWS

To enable a “direct” communication between MIR™ devices and 3rd party software via USB, MIR is proud to offer the Software Development Kit for Windows-based applications. The SDK is a collection of libraries (.dll files for Microsoft .NET applications) that allows the **Communication** with MIR spirometers and also include the algorithm for the **Interpretation** of spirometry tests results.

MIR spirometers to be integrated via the SDK for Windows:

- With Oximetry Option: Spirolab™, Spirodoc™, Spirobank II™ Advanced
- Without Oximetry Option: Minispir™, Spirobank II™ Basic

Available windows OS:

- Windows PC
- Windows Tablet
- WindowsRT is NOT supported

What does the SDK do:

Will enable you to easily connect and command MIR spirometers and oximeters, into your own windows application. Third party Software developers will take advantage of the many libraries included in the sdk covering many different environments.

How to get the SDK:

In order to receive the Software Development Kit from MIR, you must follow this procedure:

- get in touch with a MIR representative and introduce your projects and needs, eventually sign a NDA agreement if necessary to share confidential information;
- Sign the License Agreement and Pay the Start-Up Fee as mentioned in the Agreement;
- Download the SDK from MIR server and start working on it.

What is included in the SDK:

The SDK will also include a sample App, to make the development even easier.

Which MIR Spirometer can better suite your needs?

The complete range of MIR spirometers is available on: www.spirometry.com. A OEM version may be available upon request for your preferred model and a minimum order may be required.

Why choose the SDK instead of the USB communication Protocol?

This table highlight the strenghts of the SDK compared to the USB communication protocol:

	SDK	COMMUNICATION PROTOCOL
EXTERNAL CONTROL (from client App to spirometer)	via USB	via USB
FORMAT	a collection of libraries (.dll files for Microsoft .NET applications)	a pdf file describing how to communicate with MIR devices
COMMUNICATION CAPABILITIES (to send/receive commands and data to/from the MIR spirometer)	<p>Already Implemented in the SDK.</p> <p>The client Application JUST HAS TO CALL the following functions:</p> <ul style="list-style-type: none"> • function to get an instance of MirDevice Class • function to call the method of MirDeviceClass do to a specific job (ie: MirDevice.StartTest) • function to Read the results of spirometry in a human readable format and with full interpretation of spirometry already done 	<p>To be implemented by the Client Application.</p> <p>In details, following functions shall be implemented:</p> <ul style="list-style-type: none"> • functions to verify if the MIR spirometer is connected to the USB Channel • functions to send the command to the device using • functions to read the reply of the device (a stream of bytes to be parsed) • functions to parse the reply of the device
SPIROMETRY TEST INTERPRETATION ALGORITHM according to ATS/ERS guidelines and including:	<p>Provided with the SDK.</p> <ul style="list-style-type: none"> • Predicted Values • Automatic Interpretation • Acceptability • Repeatability • Variability • Quality Control Grade 	<p>NOT provided.</p> <p>To be implement by the Client Application.</p>