

PM10N NAT Tool Download Process:

Preparation for download.

- Download and install the NAT tool: <https://www.medtronic.com/covidien/en-us/products/pulse-oximetry/nellcor-analytics-tool-request.html> (If the download locks up please try to download under Chrome)
- Download and install the Silicon Labs Driver: <https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>
 - Silicon Labs Driver is only needed for PM10N and PM100N
- If you're unsure whether you have an x86 or x64 computer system, go to System Information in Windows

- Hit Windows+R (



+ R) to open the Run box.

- Type "msinfo32" into the "Open" field, and then hit Enter.
- You should immediately see the System Information panel.
- Look for the System Type

Item	Value
OS Name	Microsoft Windows 10 Enterprise
Version	10.0.17763 Build 17763
Other OS Description	Not Available
OS Manufacturer	Microsoft Corporation
System Name	[REDACTED]
System Manufacturer	Dell Inc.
System Model	Latitude 5400
System Type	x64-based PC
System SKU	08B8

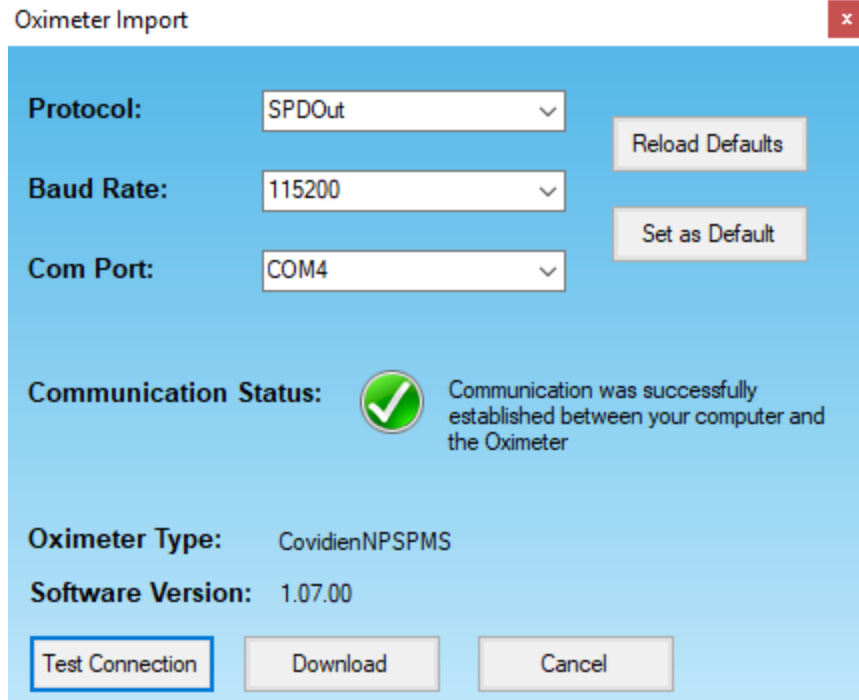
- This will tell you which of the SiLabs drivers to download.
- You'll need a USB-A /mini USB cable (Not Micro and not USB-A to USB-A)
- Possibly will need a USB hub (see below)

NAT download of data from a PM10N

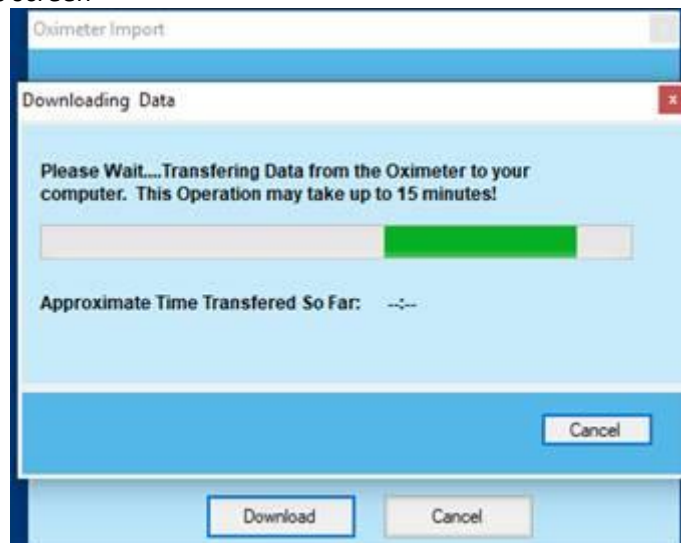
- The PM10N has to be on the entire time for the transfer. For long data transfers (like sleep studies) the power saving can cause the device to power off and interrupt the data transfer. Check the power saving settings in the Service Menu (password 6290). Please be aware of the time-outs for screensaver and for power saving before you start the transfer.
- Connect USB from PM10N to computer either directly or through USB hub. If in later steps, the connection is not being recognized, try using a hub.
- Once Connected, and PM10N is powered on, go to Start>Control Panel>Device Manager
- In the Device Manager, find the Ports section, and expand it.
 - If connected and recognized, you'll see: Silicon Labs CP210x USB to UART Bridge (COM#)
 - The COM# will change depending on your device and when you plug in the PM10N.
 - You have to check the Device Manager every time for the COM port being used.

- Ports (COM & LPT)
 - Intel(R) Active Management Technology - SOL (COM3)
 - Silicon Labs CP210x USB to UART Bridge (COM5)

- The NAT tool doesn't have to be running to see this in the Device Manager.
- The PM100N doesn't have to be in any particular mode to see this in Device Manager.
- If the connection does NOT show in the Device Manager
 - Try a different mini USB cable.
 - Cable type is really crucial here. USB-A to USB-A will not work.
 - Or try a USB hub
 - Try different ports on the PC (may be a difference between USB 2.0 and USB 3.0)
 - Check to make sure the driver is actually installed. The only way to do this if there's no connection is by reinstalling it.
 - Make sure the Monitor is powered on
 - When has this worked for you last?
 - What has changed since then?
- Once the connection does show you'll have to adjust settings on the PM10N and on the NAT Tool
 - PM10N settings should only require the following:
 - Go to the Service Menu (Password 6290)
 - Change or verify that the communication Settings are: SPDOut 115200
 - i.If this setting fails, try a lower value, like SPDOut 19200
 - ii.If both of the above fail, try ASCII 115200 or ASCII 19200.
 - Exit service menu
 - NAT Tool Setup (The process starts with the NAT tool).
 - Go to Tools>Import Data from Oximeter
 - Set Protocol to SPDOut and 115200 baud (Always use the same settings on the PM10N).
 - SPDOut is preferred for PM10N. However, you can also use ASCII (NBSPMS only)
 - Baud Rates reflect the speed of transfer. The higher the number, the faster the transfer. Starting with 115200 baud should get you the data quickest.
 - However, a baud of 19200 is fine and is preferred for some devices like the PM100N.
 - You can keep trying lower baud rates until you are successful.
 - COM Port should be whatever you found in Device Manager above (below, it is COM4).
 - Next, "Test Connection".



- If successful, proceed.
- If [Test Connection] fails, then try to connect at least two additional times.
- If [Test Connection] fails at least three times, check your settings, check to make sure the PM10N is set for the correct protocol, check your connections.
- Once you get a successful connection, the next step is to click the Download button.
- You get this screen



- Once you see that on the screen, the PM10N monitor will begin to gather the data to send.
- As noted in the screenshot, this can take quite a while.

- The “Approximate Time Transferred” is not an estimation of how long. It’s an estimation of how much time has been stored on the PM10N.
- Sleep Study data can take a very long time. It is advised that you watch the device the entire time to make sure that it doesn’t time out or shut down to avoid a transfer error.

Battery Best Practice - If using the PM10N with Li batteries plan on getting 2 sleep studies from the unit and then change the batteries. Battery life is 20 hours using lithium batteries and 2 sleep studies is all that can be expected from a set of batteries.