



Setting up data logger and downloading data from VP Instruments flowmeter

The VP Instruments flowmeters are available with a data logger option which enables logging of time stamped flowrate, pressure, temperature and totalized flow.

Please refer to the VP Instruments product manual for instructions how to set up, configure and use your flowmeter. This document is meant only as a general guide to assist with downloading data and not as a substitute for the manual.

On completion of the logging, the data can be downloaded using a download cable (for inline and M series meters or using the JB5 junction box/interface (for VP Flowscope and VP Flowscope dp.)

A windows based program VP Studio is available for download from the VP Instruments website or available from Pricam Automation at no cost.

After the data has been logged and downloaded to your PC, each log file can be organized in project folders.

The downloaded data is available as either a csv (comma separated variable) file or as an excel file with the time stamp and corresponding variables organized in columns.

From here, the data can be graphed using standard tools in Excel.

Step 1 : Download and install VP Studio software program

The VP Studio software can be downloaded from VP Instruments website or supplied by Pricam Automation.

On the VP Instruments website www.vpinstruments.com , go to Support-> Downloads -> Software downloads and select VP Studio for all products.

Download and install the software on your PC.

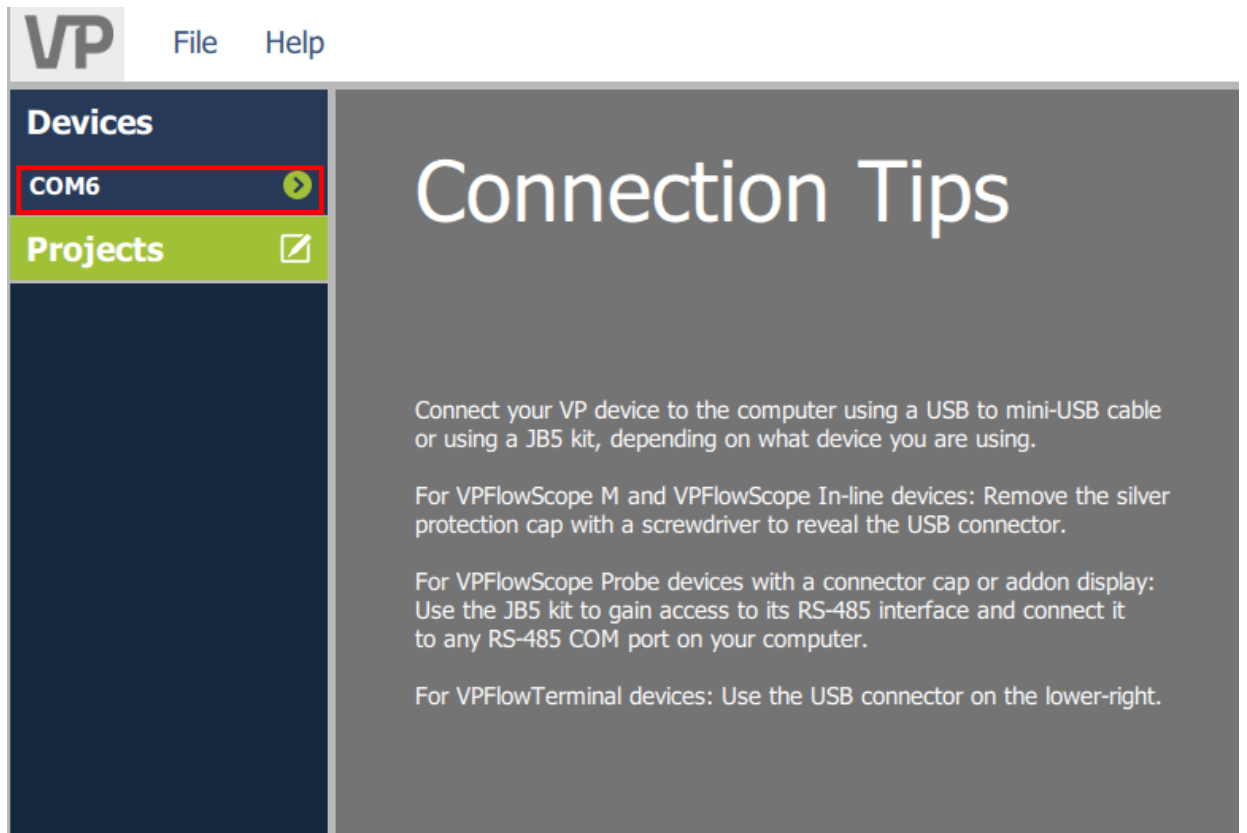
Connect the flowmeter to your PC USB port. The below screen should appear.



The VP Studio software will automatically search for the flowmeter and identify the designated COM port, this may take 20-30 seconds. In example below, the PC has identified port 6.

If the software is unable to find the flowmeter, please try the below steps.

1. Remove and then reinsert the USB cable.
2. Try connecting to a different USB slot.
3. Check that the flowmeter driver is installed (pls see next page).

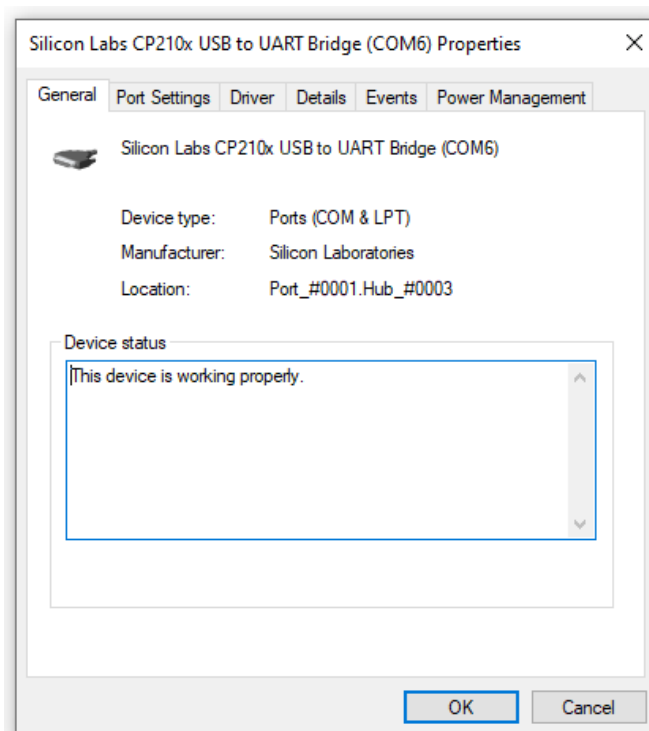
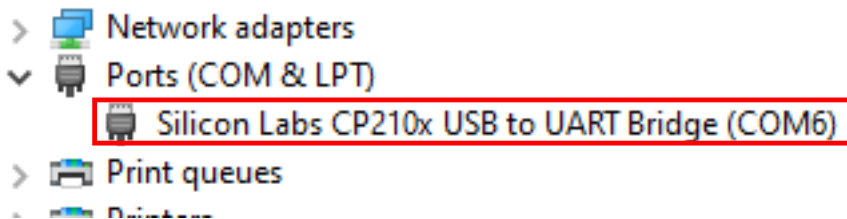


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The software needs a driver to communicate with the flowmeter. This driver is normally installed automatically by your Windows program when the flowmeter is connected to your PC.

To check that the driver is installed, go to your PC device manager. You can find it by typing in Device Manager in the Windows search tool.

Look for the heading “ports”. There should be at least one item showing. If there are more than one item under Ports, pull out the USB plug, the item which disappears should be the flowmeter driver item. Plug in the USB again and click on the item and select the General Tab. The text box should say that the device is working properly.



If the driver is not installed, please go to the VP Instruments download area, download and install the driver for your Windows version, then check again in device manager that the driver is installed and running.

Step 2 : Configure the flowmeter log intervals.

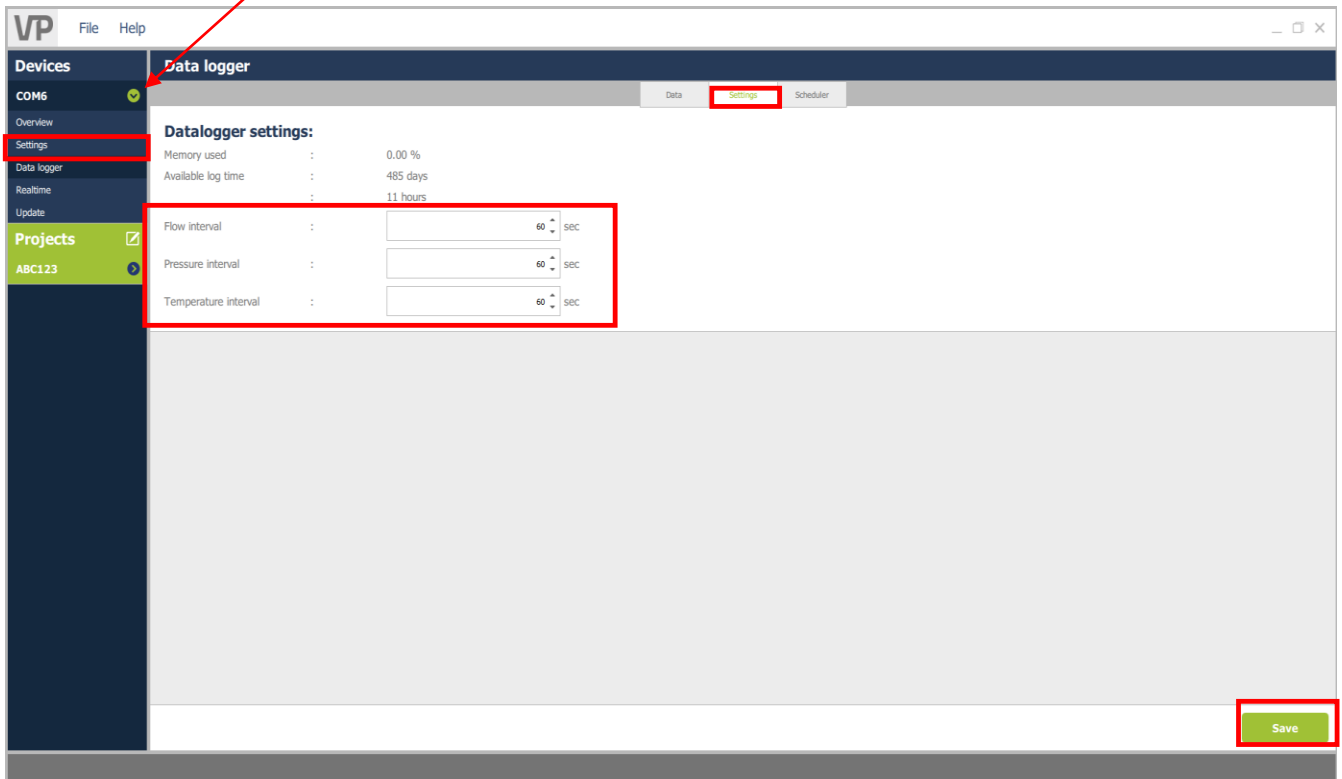
The log rate can be configured for each of the variables. For example, logging the data every 60 seconds. The shorter the log intervals, the quicker the data logger will fill up.

Remember to ensure the date and time is set correctly in the flowmeter before each logging session, please refer to the instruction manual.

Consider how fast changes take place in your system and choose the log interval accordingly.

Click on Data logger, select the settings tab and enter the intervals, then click on save. After saving, the memory used and available log time is calculated and displayed.

Click on arrow to open menu



The screenshot shows the VP Instruments software interface. The top bar includes 'VP', 'File', and 'Help'. The left sidebar has 'Devices' and 'Projects' sections. The 'Data logger' section is active, showing 'Data logger' settings. The 'Settings' tab is selected, and the 'Datalogger settings:' section displays the following information:

Setting	Value
Memory used	0.00 %
Available log time	485 days
Realtime	11 hours
Flow interval	60 sec
Pressure interval	60 sec
Temperature interval	60 sec

The 'Save' button is located at the bottom right of the interface.



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Step 3 : Start and Stop the flowmeter data logger

On the flowmeter display panel, press the ESC button once, the display will say “Start recording ?” Press the MENU button once to confirm.

When the data logger is active, there is a flashing dot on the top right corner of the display.

On completion of the logging, repeat the same steps, i.e. press the ESC button once followed by the MENU button.

Every time the logger is started and stopped, the flowmeter creates a new log file.

The logged data can only be downloaded after the logging has stopped.

Also, disconnect the flowmeter from the PC before starting the logging.

Step 4 : Download the data into a project.

Make sure the data logger has been stopped, then connect the flowmeter to the PC, select data logger on the left panel, then select the data tab.

Choose your log file in the top pane, then choose the project in which the the log file should be stored in the bottom pane then click the download button.

A new dialogue window will appear, choose a suitable session name, then click Yes. On completion of the download click close.

Each log file needs to belong to a project to keep them organized. A project could be e.g. a machine or section of the plant. (To create a new project, click on the Create Project button, enter your preferred name and details, then click save.) The new project will appear in the green Projects box on the left pane and also in the bottom pane.

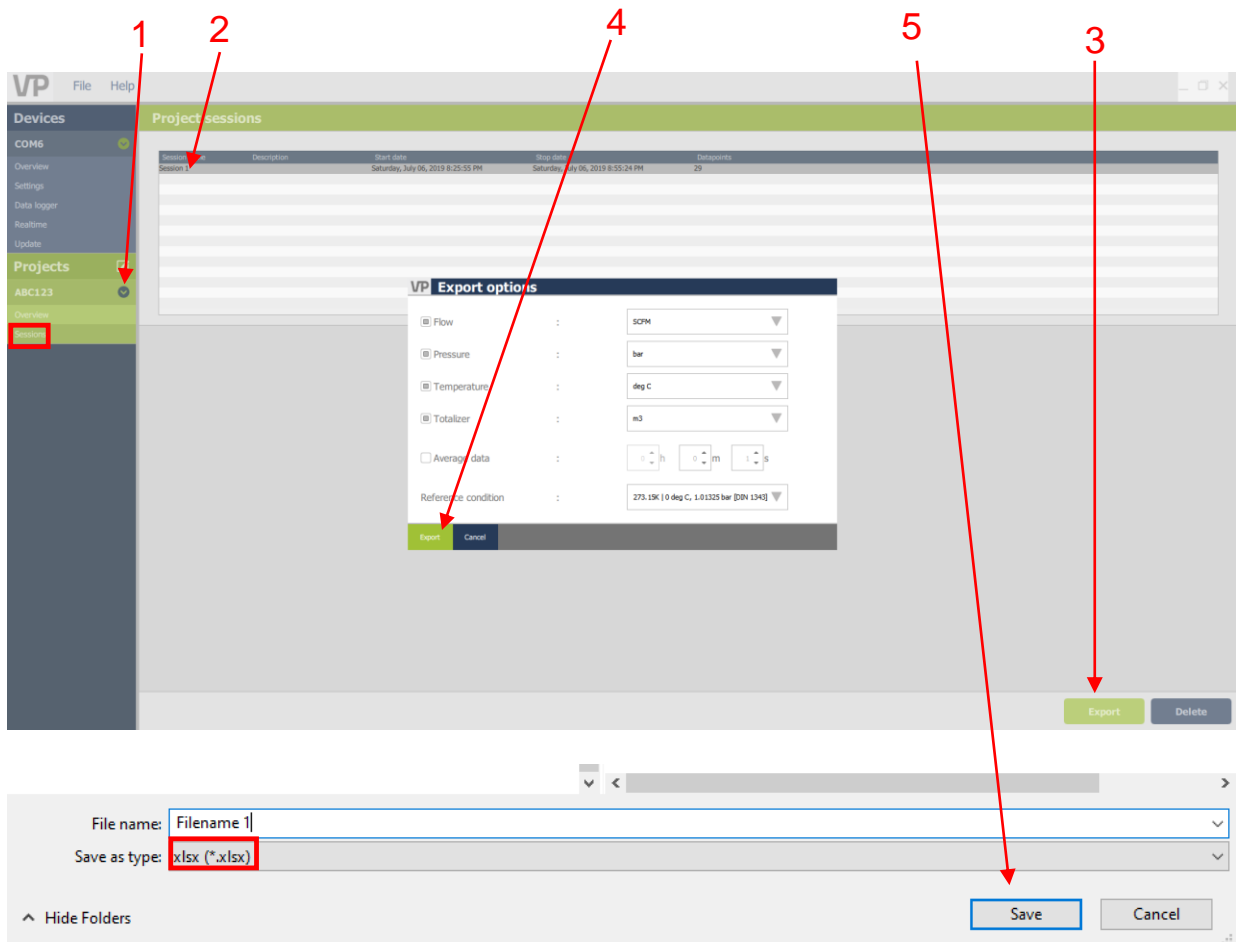
Click the arrow to open submenu with individual logfiles

Download	Timestamp	Start date	Stop date	Memory usage	Tube diameter	Total points
<input type="checkbox"/>	July 27	06-Jul-19 8:25 PM	06-Jul-19 8:55 PM			
<input type="checkbox"/>	week 28	08-Jul-19 6:59 AM	08-Jul-19 7:01 AM			

Step 5 : Export the data as Excel or csv file.

Now your log file has been organized in a project in VP Studio. The next step is to convert the log file into a format which can be opened in Excel.

Click on the arrow next to your project name in the green Project box and select “sessions” (1), then select the logfile you want to convert (2). Press the export button which opens a new window (3). Choose the engineering units you want to use for each variable as well as the reference pressure and temperature and press export (4). After 5-10 seconds a new window will open so you can choose where you want to save the converted file on your PC. Select a file name of your choice and the file type. If you want to open the file in Excel, choose xlsx. Then click Save (5).





Step 6 : Open the file in excel

Start your excel program and open the file from the destination folder.

The data is presented in columns. From here you can use the excel graphing tool to present the data in your preferred design.

	A	B	C	D	E	F	G
1	Reference condition	Tube diameter					
2	273.15K 0 deg C, 1.0	15.000 mm					
3	Timestamp	m3/hr	deg C	bar	m3		
4	08-Jul-19 9:02 AP				0		
5	08-Jul-19 9:03 AP	0	28.92	-0.02722	0		
6	08-Jul-19 9:04 AP	0	28.8756	-0.0268	0		
7	08-Jul-19 9:05 AP	0	28.8459	-0.0265	0		
8	08-Jul-19 9:06 AP	0	28.8241	-0.02651	0		
9	08-Jul-19 9:07 AP	0	28.7926	-0.02634	0		
10							
11							

We are here to help 😊

Give us a call on 03-9532 2235 if you need any assistance.