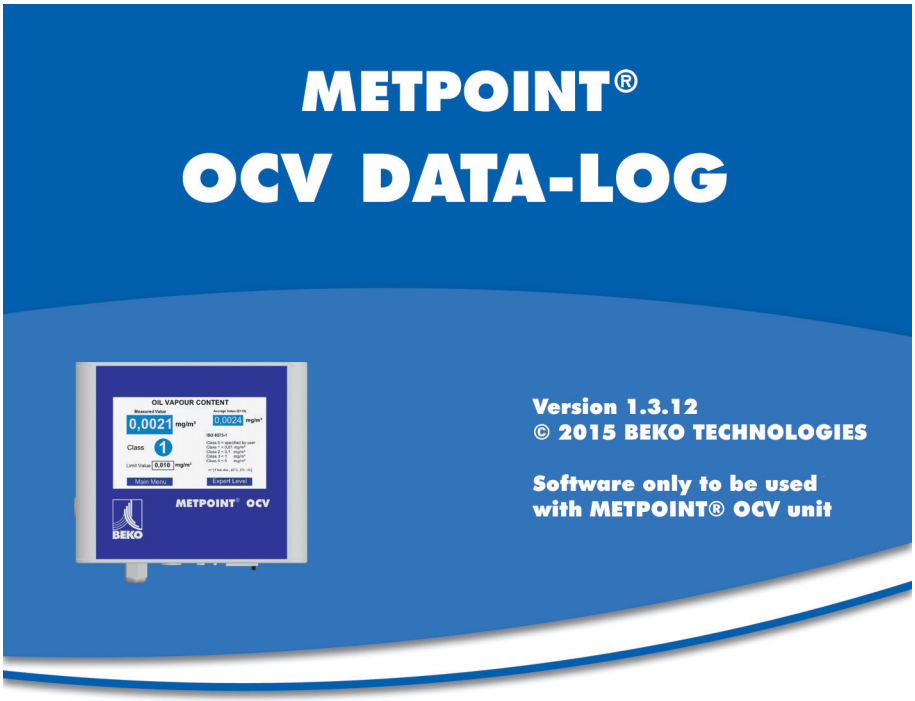
EN - English

Instructions for installation and operation

METPOINT® OCV
DATA-LOG



10-044

Dear Customer,

Thank you very much for having chosen METPOINT® OCV DATA LOG software. Please read this installation and operating manual carefully before installing and using the METPOINT® OCV DATA LOG and follow our directions. Proper operation of the METPOINT® OCV DATA LOG is guaranteed only if the instructions and directions specified are strictly observed.

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2 General information

Before reading the operating manual check whether you have the right manual at hand. The operating manual must be accessibly available at all times at the site where the software is being used.

To ensure a secure transfer of data, the software must be installed and used solely in accordance with the specifications in the operating manual.

Disregarding the installation and operating manual results in risk to persons, plant and equipment.

If there are ambiguities or questions about this manual, please contact BEKO TECHNOLOGIES GMBH.

3 Scope of application and proper use

The METPOINT® OCV DATA LOG software is used for displaying and storing the measured values collected using METPOINT® OCV. Any use in excess of this is considered as unintended. The manufacturer is not liable for the consequences of improper use. The operator is solely responsible for any risk that might result.

4 System and function description

The METPOINT® OCV DATA LOG software is used for displaying, remotely analysing and storing the measured values collected using METPOINT® OCV.

Displaying and storing the measured values for residual oil content ascertained using METPOINT® OCV can be done on a directly connected notebook/PC and on a notebook/PC connected via the web.

As a result, the measurement can be tracked on the notebook/PC.

Every measured value from the current collection of data can be read. This also makes it possible to monitor the measured values over an extended period of time.

In addition, the program provides the means for updating the measurement device software and makes establishing an FTP connection to the device easier.

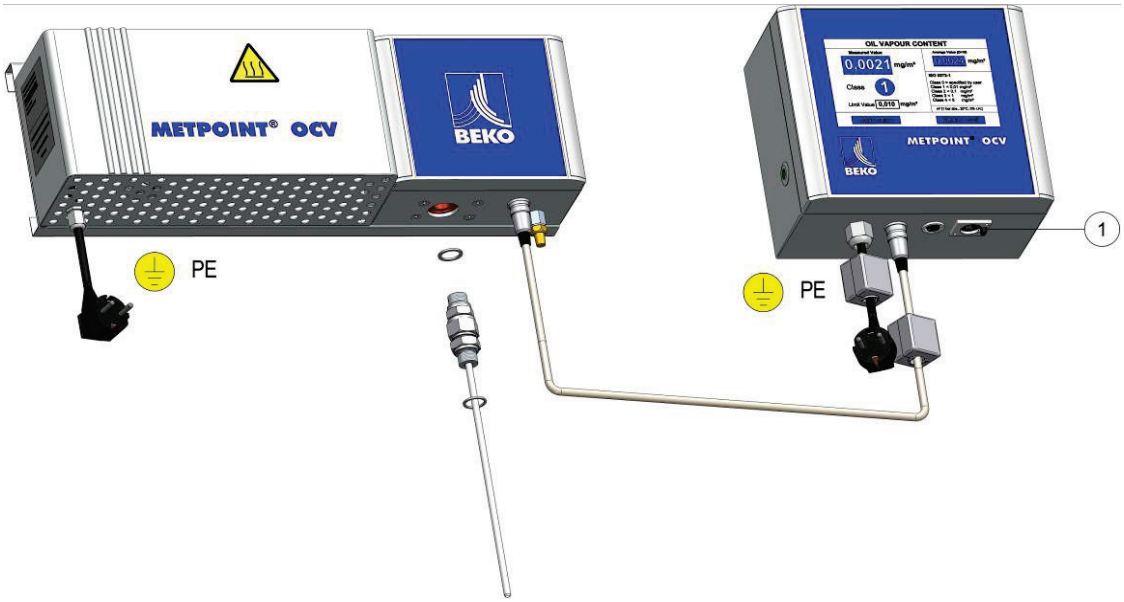
5 System requirements

Network:	.NET Framework 4 (if not present, is automatically installed before the program)
Storage space for network	280 MB
Supported operating systems	Microsoft Windows XP
	Microsoft Windows Vista
	Microsoft Windows 7
Minimum hardware	Suitable for the particular operating system used
Storage space for software:	25 MB
Interface:	Ethernet interface

6 Connecting the network / notebook to METPOINT® OCV

Connect the interface for your network / notebook to the METPOINT® OCV (1) Ethernet interface intended for it using a corresponding network cable.

It should be noted that the connection from the device to the notebook is made using a **crossover cable**. The connection to a network is made with a simple **patch cable**.



7 Installing and setting METPOINT® OCV DATA LOG

This chapter describes the connections and settings that must be made for the METPOINT® OCV DATA LOG software to operate properly.

NOTE!

Administrator rights are mandatory for installing the METPOINT® OCV DATA LOG software. Please make sure that you are provided with the appropriate permissions. Please call on the assistance of appropriately trained and authorised technical staff.

7.1 "Settings" menu

The settings that are required for connecting METPOINT® OCV into an in-house network or for connecting directly to a PC or notebook are made in this menu.

As a rule, two options are available here:

- automatic connection by DHCP
- manual configuration

Note to the network administrator

Communication via a **network** between METPOINT® OCV and a PC works with the METPOINT® OCV DATA LOG software only if both are in the same **subnet**. You can find out in the manual for your router whether and how the forwarding function is executed in your router.

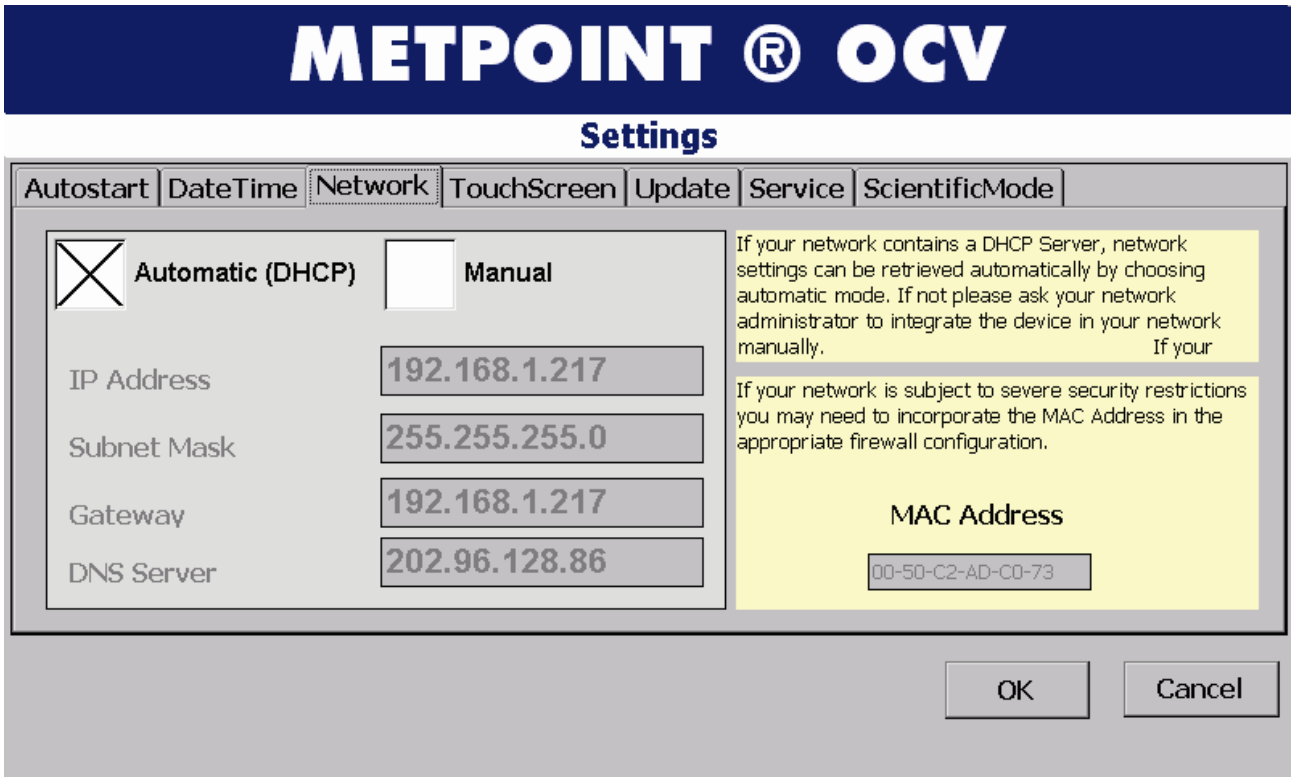
Requisite firewall settings:

HTTP:	Enable port 1111 (in- and outbound)
in addition:	Enable port 5000 (TCP) for device update
FTP connection:	Port 21 (TCP) (outbound for passive only)
	Port 21 (TCP) (in- and outbound for active)

It is also possible to manually establish an FTP connection to a device in another subnet. Please contact your network administrator.

"metpoint" for the user name and "logfiles" for the password must be specified as the login data.

7.2 "Network" selection



Select the desired method in the menu sub-item **NETWORK**:

- Automatic IP address assignment via DHCP
- Manual IP address assignment.

To use this selection, go to main menu **SETTINGS** and then select **NETWORK**.

7.3 Connection via DHCP

If connection via **DHCP** is selected, no additional settings are required. This is based on the prerequisite that the connected network has a DHCP server.

7.4 Manual network connection

Here, the network connection data must be entered manually. The following entries are required:

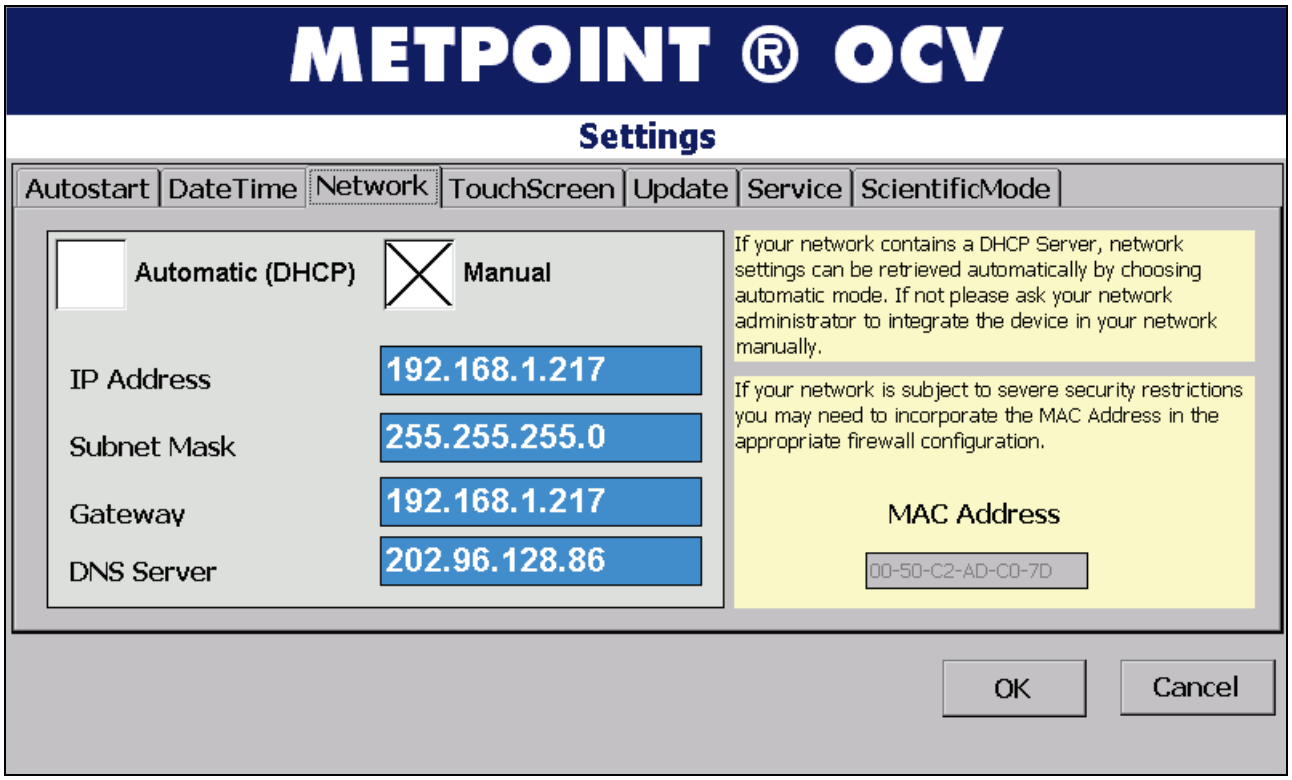
- IP address
- Net mask
- Gateway address

It must be ensured that different IP addresses are assigned to all devices in the network. However, the network portion of the IP address must be identical for all devices that communicate with each other within a network.

NOTE!

Please call on the assistance of appropriately trained and authorized IT specialists.

7.5 Establishing a direct connection to a notebook / PC



The connection from the device to the notebook is established using a **crossover cable.**

A direct connection to a notebook can also be established by means of manual configuration or automatic address assignment via **DHCP (Auto-IP)**.

7.6 Manual connection to a notebook / PC

Important note!

When establishing a manual connection, ensure that the IP addresses of device and notebook are different in the device portion of the IP address.

1. Please check the network settings on METPOINT® OCV.

Important note!

The **Manual Setting** must be activated and the settings indicated below appear on the display.

IP address:	192.168.1.217
Subnet:	255.255.255.0
Gateway:	192.168.1.217
DNS server:	202.96.128.86

- Correct any discrepancies you may discover.
- Please confirm the settings and return to default view.

For more information on this menu item and settings, refer to the METPOINT® OCV operating manual.

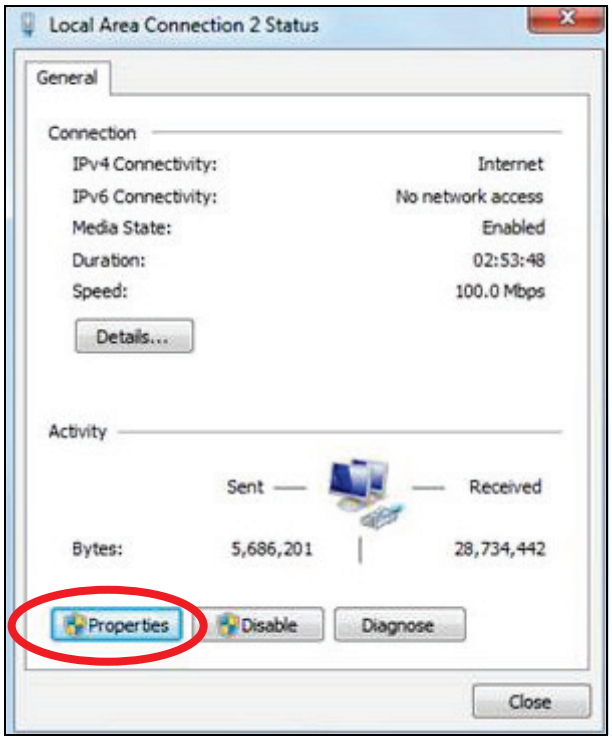
2. Please start your PC.

3. Connect the METPOINT® OCV and the notebook / PC via a crossover cable.

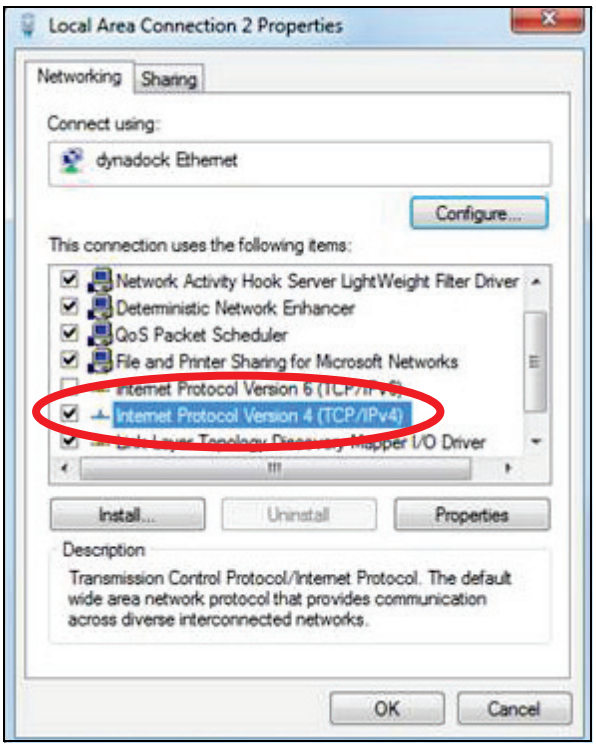
4. In the task bar, please double-click on the **Network Symbol**. The window described under item 5 appears.

Or select Settings / Network connections in the start menu. After double-clicking on LAN connection, the following window appears.

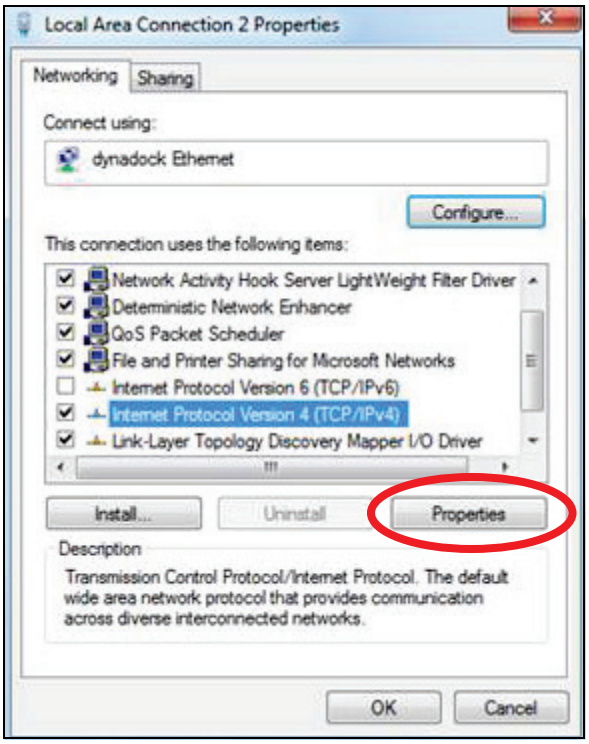
5. Now click on "**Properties**" button.



6. In the following window, select item "**Internet protocol TCP/IP**". This selection may require you to scroll the list down.



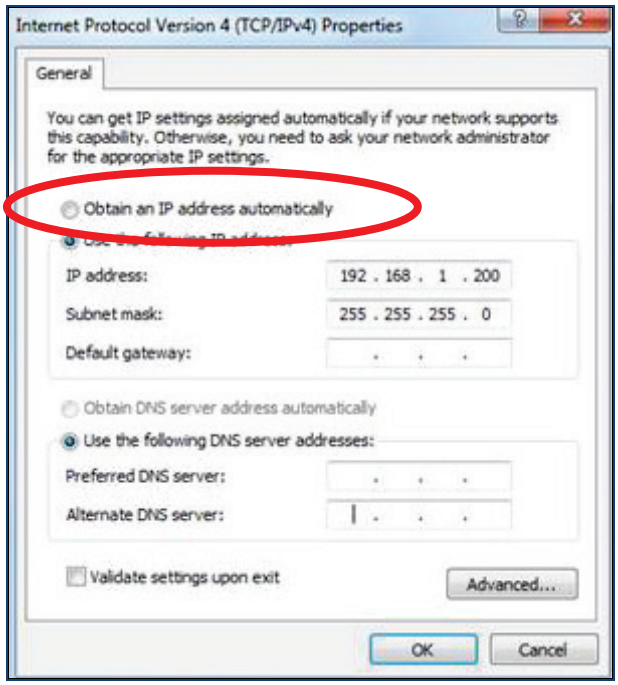
7. Now click on "**Properties**" button.



Important note!

Before making any changes in the visible window, please write down the current settings and values of the notebook / PC.

8. Click on "**Use the following IP address"**.

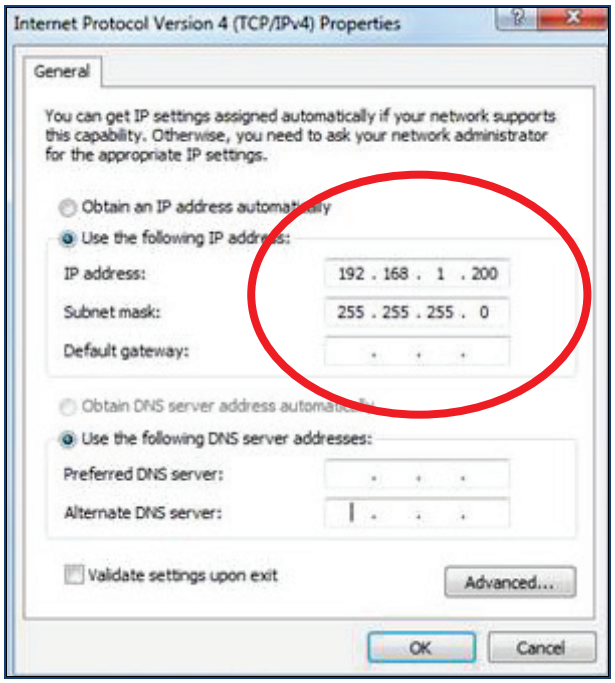


9. Now enter the addresses in the corresponding fields. For example:

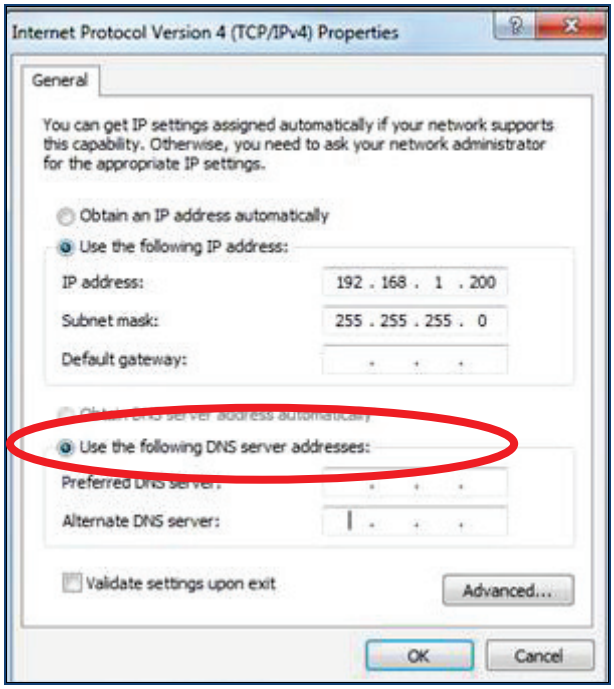
IP address: 192.168.1.200
Subnet: 255.255.255.0

Important note!

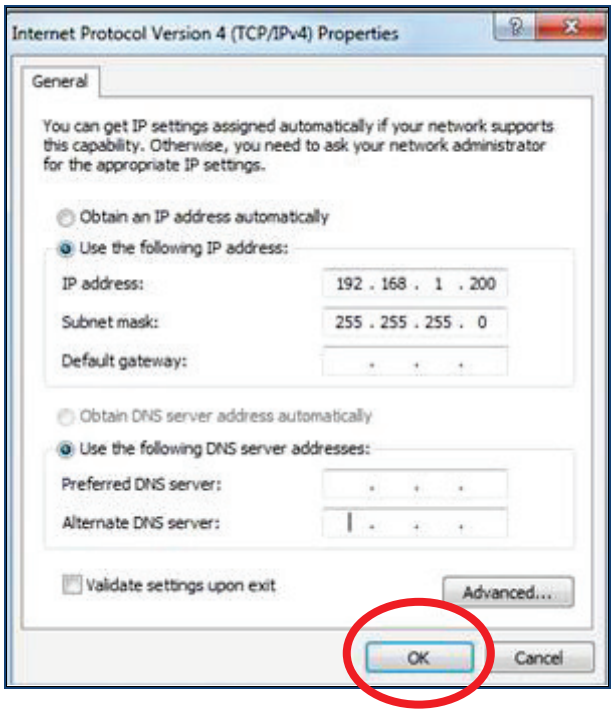
Ensure that PC / notebook and METPOINT® OCV do not have the same IP address!



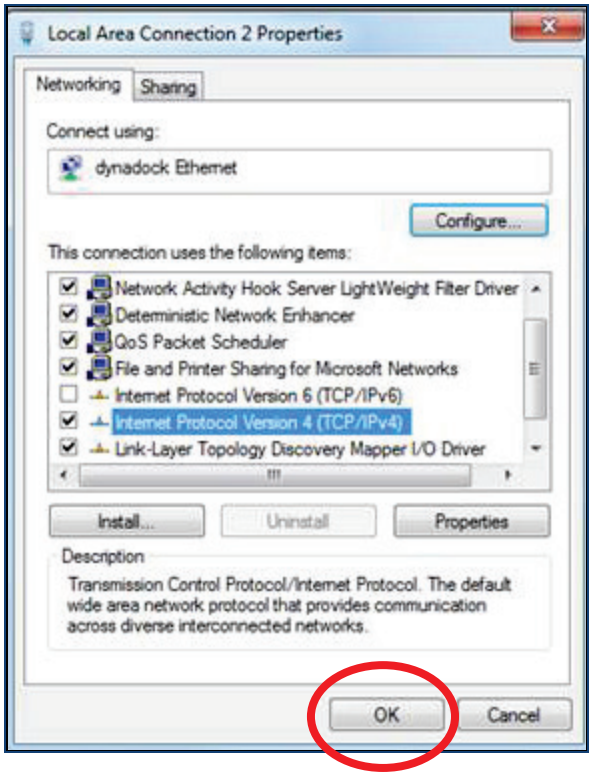
10. Click on "**Use the following DNS server**".



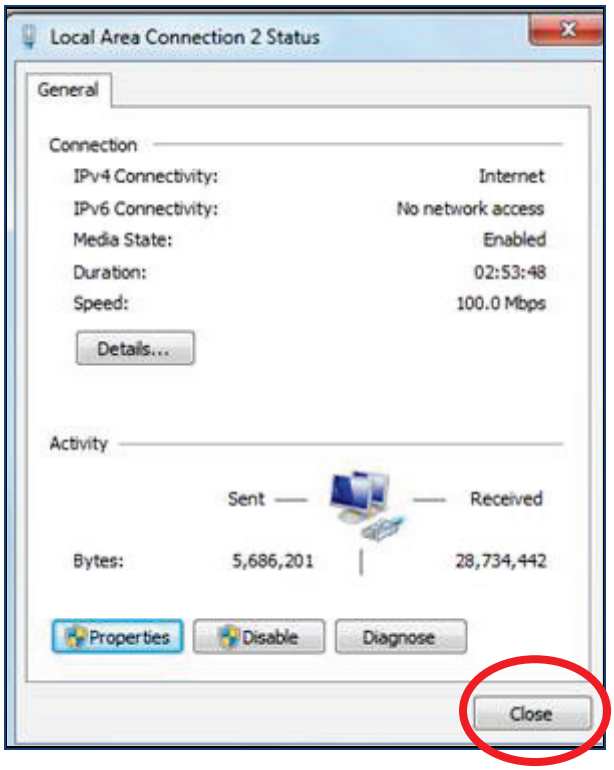
11. Next, please click on "**OK**".



12. Next, please click on "**OK**".



13. Next, please click on "**Close**".



Now all the settings for the connection have been performed. The **METPOINT® OCV DATA-LOG** software can now be used according to the following operating manual.

8 The METPOINT® OCV DATA LOG program

8.1 Installation and start of METPOINT® OCV DATA LOG

To use METPOINT® OCV DATA LOG, the program must be installed from the CD-ROM provided. To do so, insert CD into the CD drive of your PC or notebook. If your autostart function is activated, the installation program will start automatically. Otherwise, go to **Windows Explorer** on the CD, search for the **setup.exe** or **setup** file, and double-click.

To install the program, follow the installation instructions.

After successful installation, you can start the programs by double-clicking on the newly created symbol / icon on your **Desktop** or in the **Start menu**.

Note to the network administrator

Communication via a **network** between METPOINT® OCV and a PC works with the METPOINT® OCV DATA LOG software only if both are in the same **subnet**. You can find out in the manual for your router whether and how the forwarding function is executed in your router.

Requisite firewall settings:

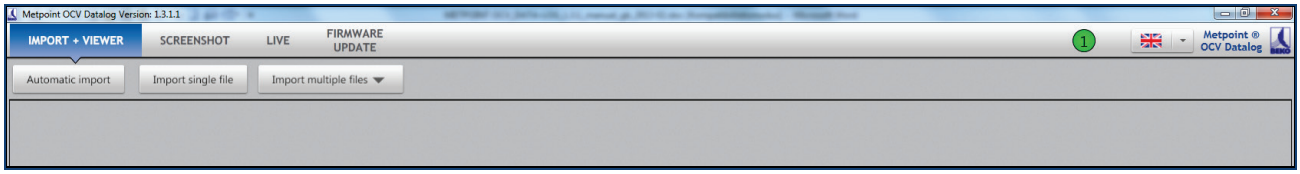
HTTP:	Enable port 1111 (in- and outbound)
in addition:	Enable port 5000 (TCP) for device update
FTP connection:	Port 21 (TCP) (outbound for passive only)
	Port 21 (TCP) (in- and outbound for active)

It is also possible to manually establish an FTP connection to a device in another subnet. Please contact your network administrator.

"metpoint" for the user name and "logfiles" for the password must be specified as the login data.

8.2 Start screen

After the **METPOINT® OCV DATALOG** program is started, the following appears on the screen:



The program has 4 basic functions:

- **IMPORT + VIEWER**
- **SCREENSHOT**
- **LIVE**
- **FIRMWARE UPDATE.**

A detailed description of the individual functions can be found on the following pages. Furthermore, you will find 2 additional display elements on the start screen.

8.2.1 Display of connected devices

In the header of the program, you will find the following symbol:

The symbol shows the status of the network connection, and how many METPOINT® OCV are connected.

The number indicates how many METPOINT® OCV are available for direct access in the network.

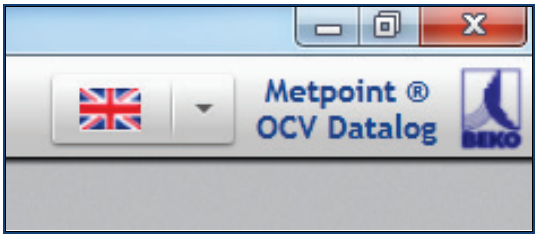
If the display is highlighted in green then the network connection is active, and connected METPOINT® OCV are available per data line. A yellow highlight signals that the notebook is connected to a network, but without connection to a METPOINT® OCV.

If the display is red, the notebook is not connected to the network.

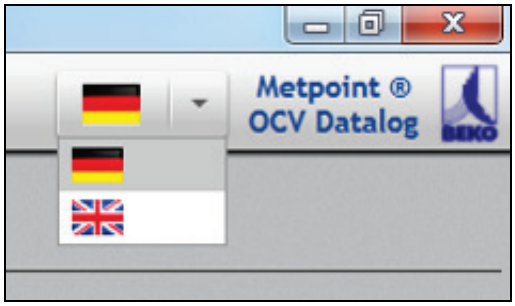
8.2.2 Language selection

The **METPOINT® OCV DATALOG** program is available in two languages. A language selection can be made between German and English.

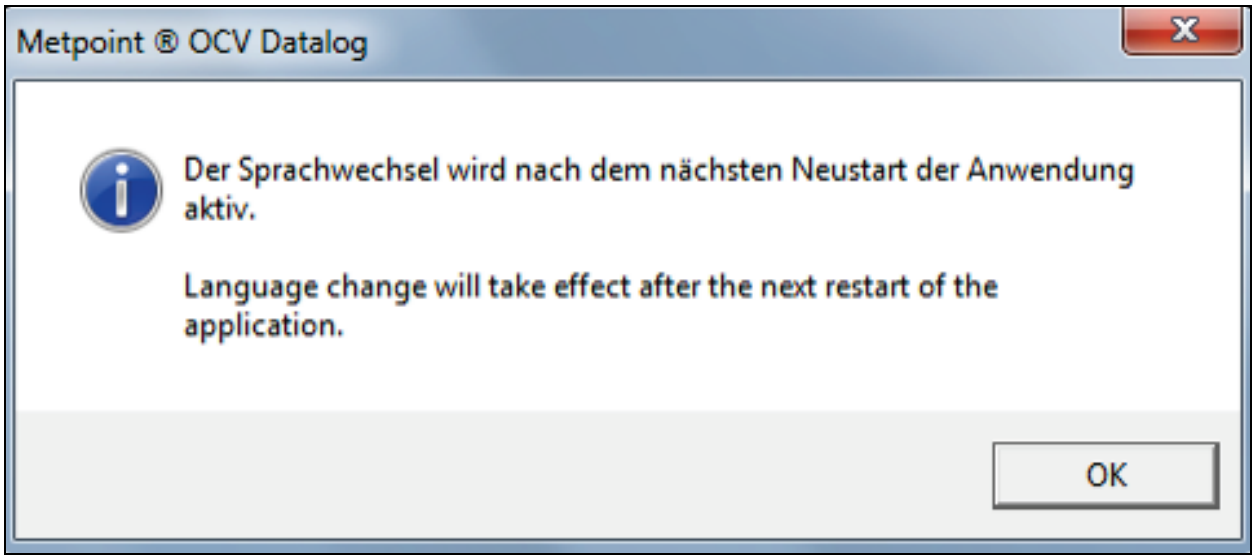
The current language setting is indicated in the right upper corner of the screen.



Use the drop-down menu to change the language setting by clicking on the desired language.



After successful change, the following note appears:

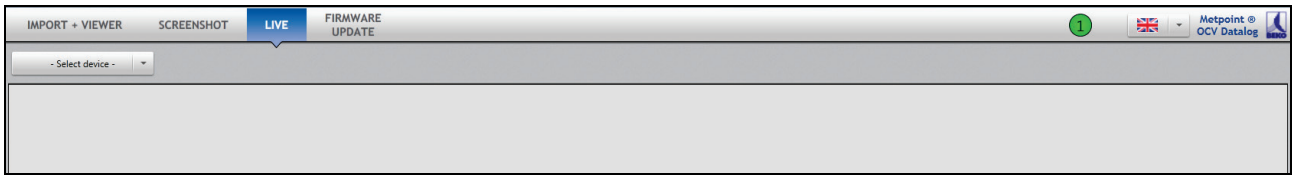


The language selection will automatically be adapted when program is restarted.

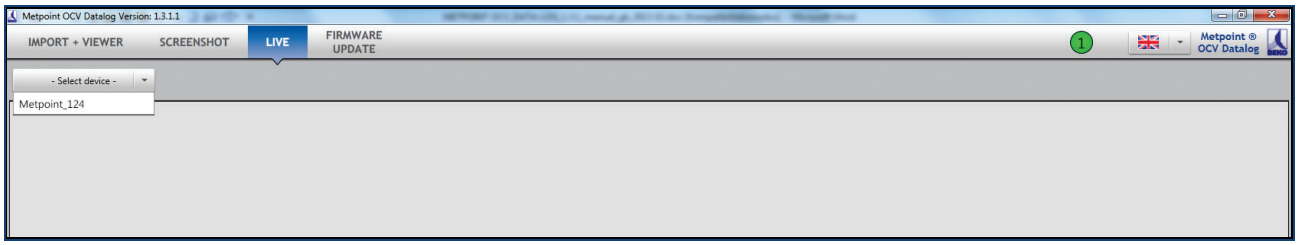
8.3 The LIVE function

This view shows the current measured value and average of the last 10 measurement cycles, as well as the respective compressed air quality class according to ISO 8573, or the development of the measured values.

First establish a connection to a METPOINT® OCV. For this purpose, select the **LIVE** function and activate the drop-down menu "Select device".

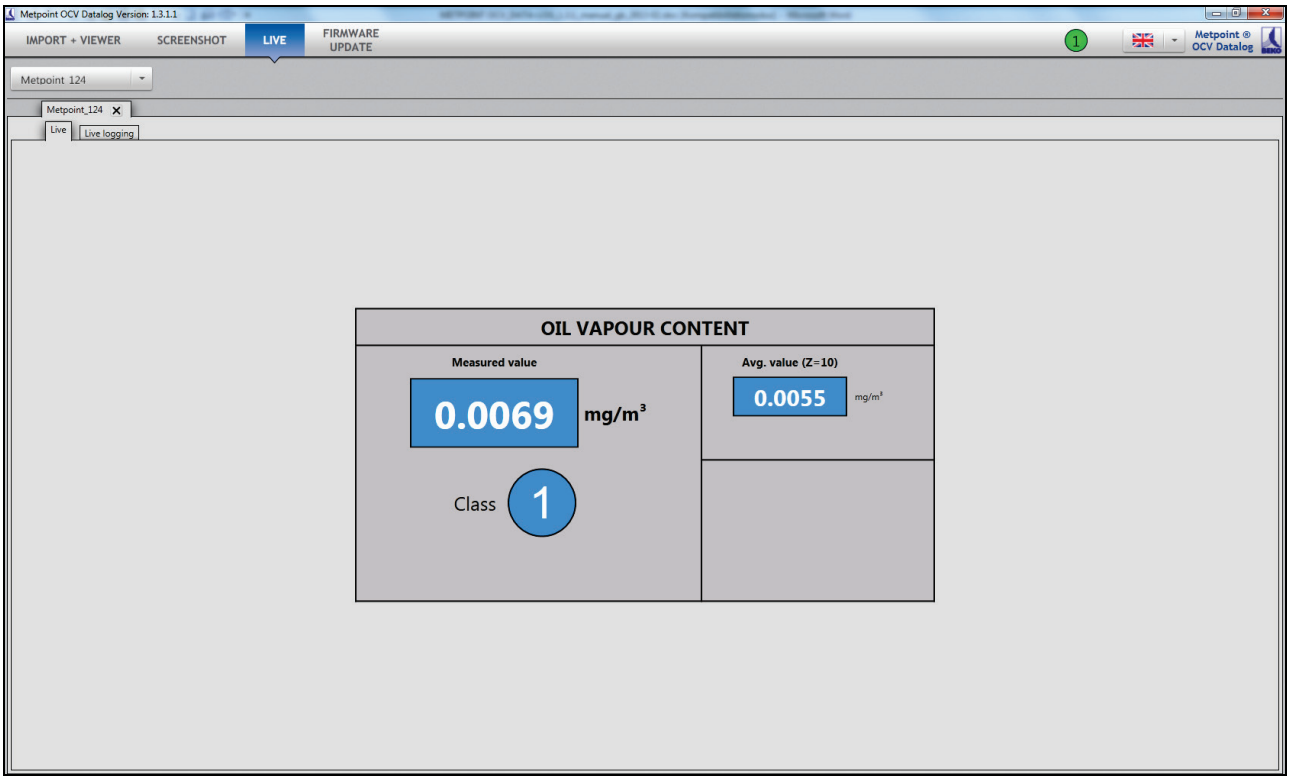


Now the available devices connected per network are displayed.

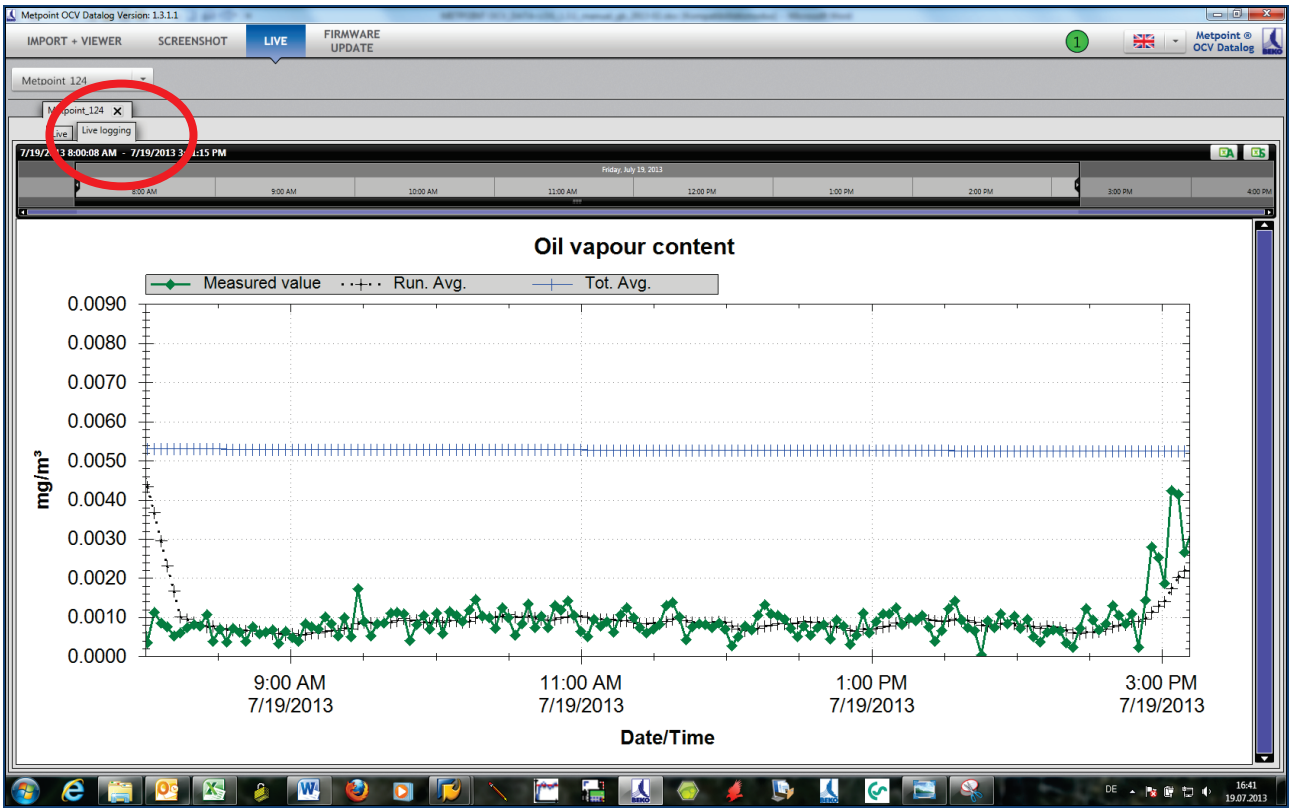


The connection is established by clicking on the desired device.

As soon as the next measured value appears on the METPOINT® OCV, the information is transferred in **LIVE** view.



In addition to the display of the measured value, the development of the measured value can also be shown. For this purpose, select the **Data diagram** tab.



The standard setting shows 3 different measured value curves:

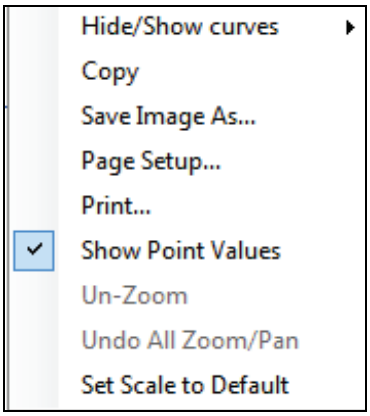
Measured value

Moving average

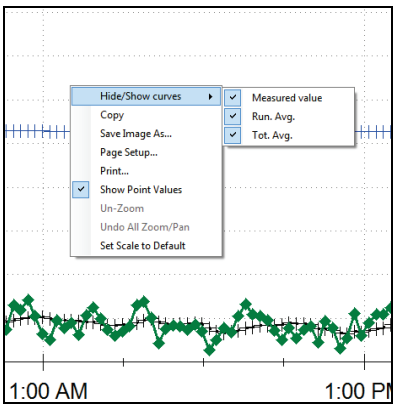
Average

8.3.1 Data diagram adaptation

Several functions are available to adapt the view of the data diagram Use the right mouse button for this. Use the left mouse button to select the displayed functions from the provided selection menu.

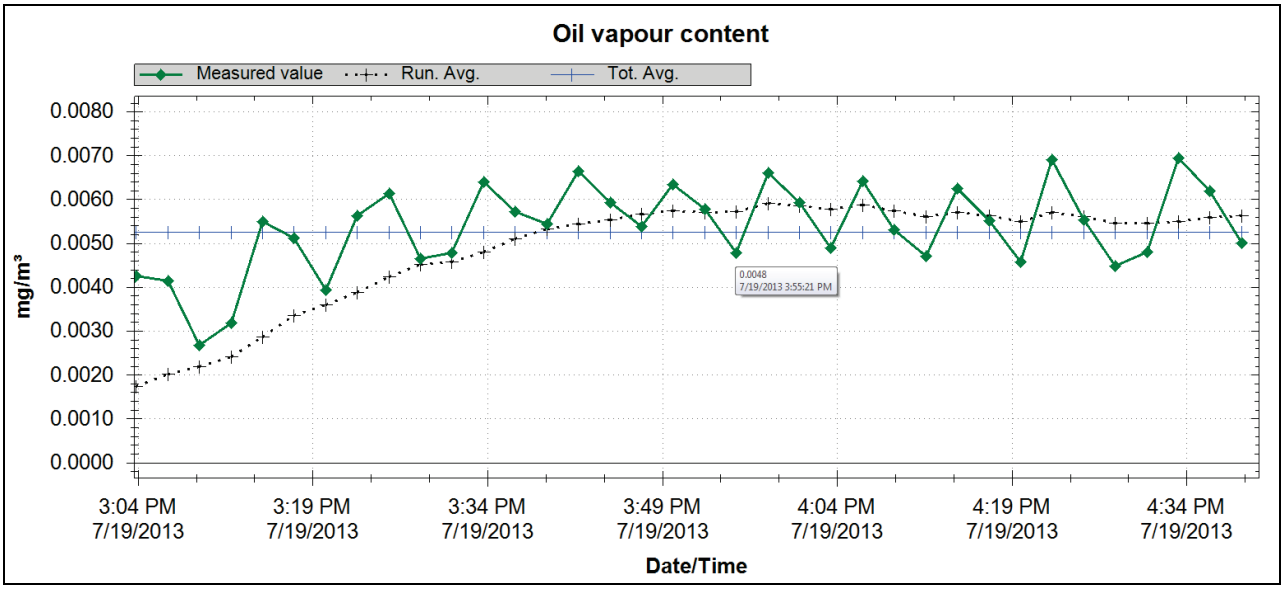


When selecting the function Show / Hide Curves, another menu appears.



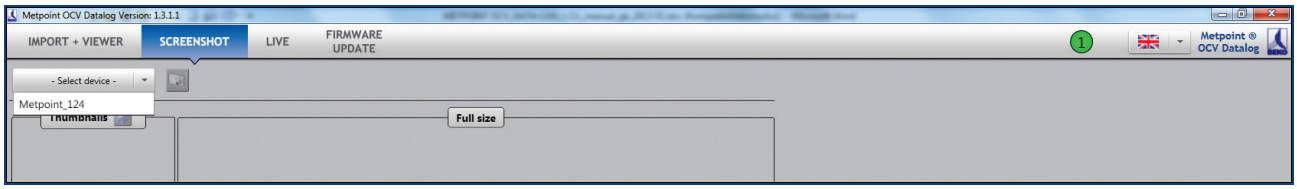
Now select via mouse click which one of the three available measured value curve options is to be displayed. Removing the check deactivates the corresponding measured value curve. The measured value curves can be shown or hidden at any time.

If the function "Show Point Values" is activated, the individual measured values can be displayed in the Data diagram via the mouse.



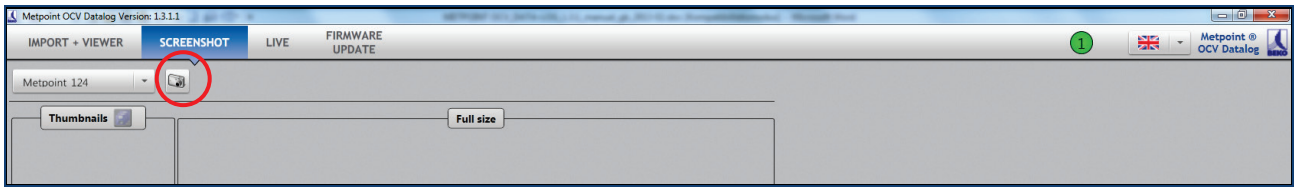
8.4 The SCREENSHOT function

The **SCREENSHOT** function makes it possible to store and further process the current METPOINT® OCV display.

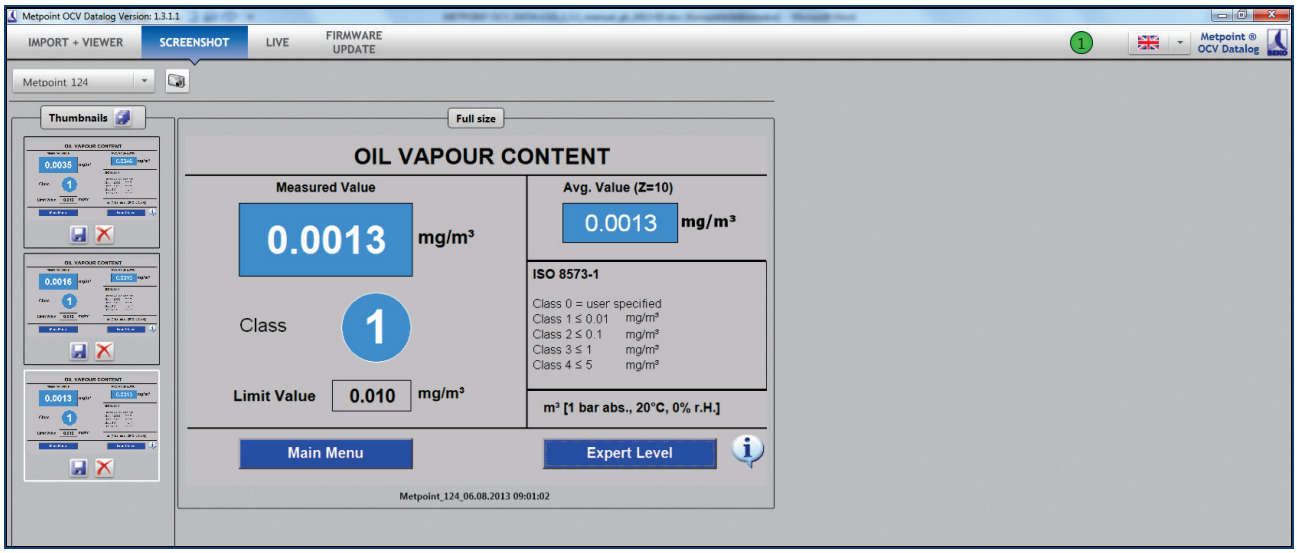


First select a METPOINT® OCV from the drop-down menu "Select Device".

Clicking on the camera symbol gives you a preview of your screen shot on the right side under the heading "Full Size".



On the left side you will find an overview of the screen shots under "Preview"; here you can select whether to save or delete the screen shot.



To save the screen shot click on the Save symbol and select the desired directory path.

The program recommends a file name consisting of device number, date and time (e.g. METPOINT_124_06.05.2013 14_00_55.png). The file name can be changed at any time.

The screen shot is only saved at the specified location in PNG format.

8.5 The FIRMWARE UPDATE function

The **FIRMWARE UPDATE** function can be used to update the METPOINT® OCV firmware. As a rule, these tasks are performed during routine calibration and maintenance of the devices or, in exceptional cases, by our service.

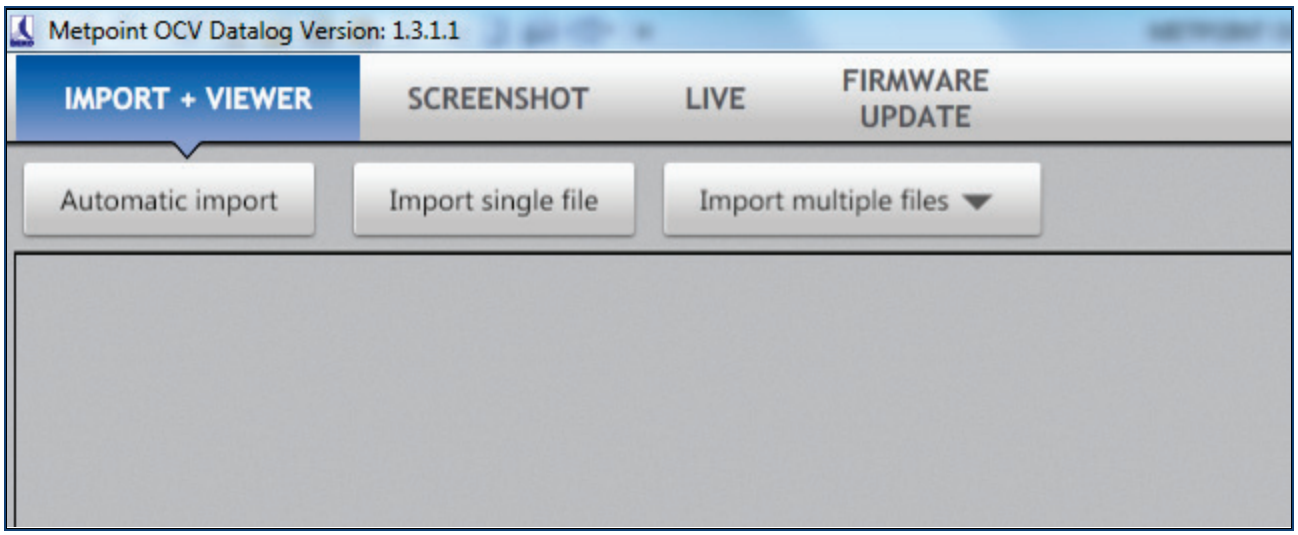
8.6 The IMPORT + VIEWER function

The METPOINT® OCV setting is such that it automatically creates log files from the measured values and stores them in the internal memory.

This program allows access to these log files during operation.

The **IMPORT + VIEWER** area includes 3 functions:

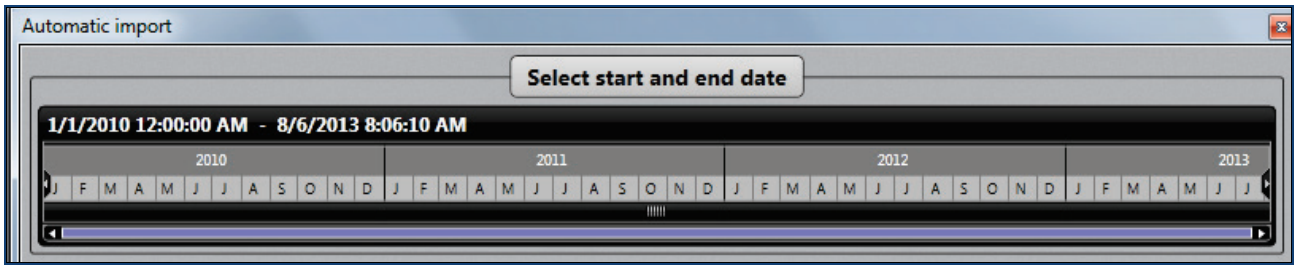
- **Automatic import**
- **Single file import**
- **Multiple file import**



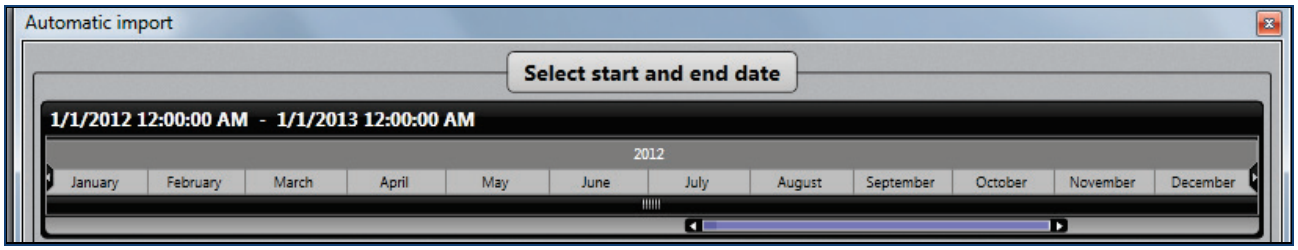
A detailed description of the individual functions can be found on the following pages.

8.6.1 Selection of data

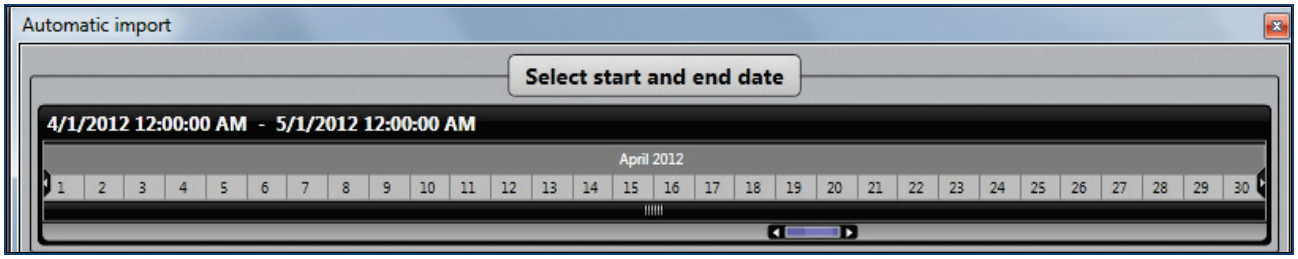
All three IMPORT + VIEWER functions require the definition of specific periods for the transaction selected. To do so, use the timeline located above the individual selection menus.

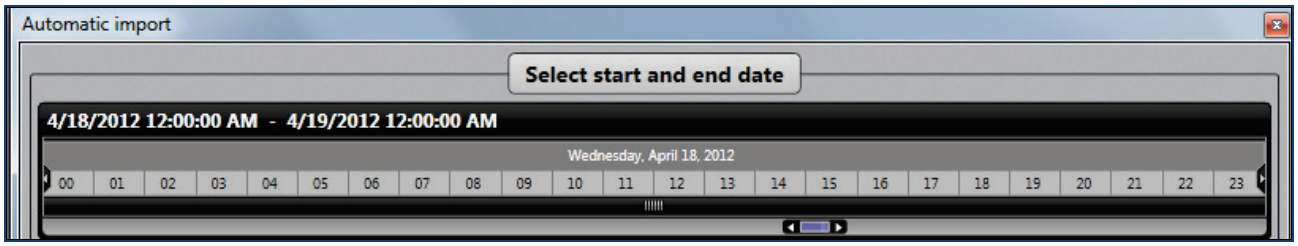


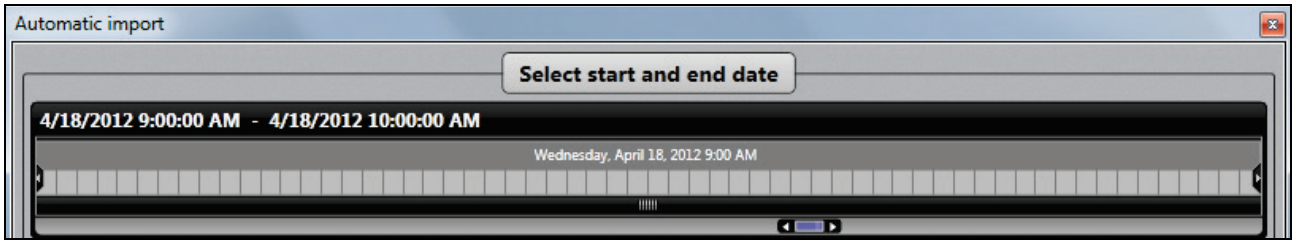
By double-clicking on the year, the period can be limited to the year selected.



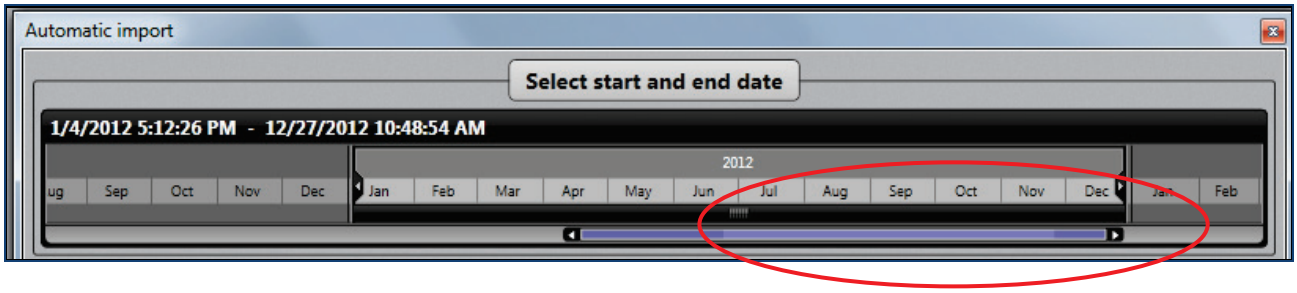
Additional double-clicks can limit the period to the desired month, day or hours.



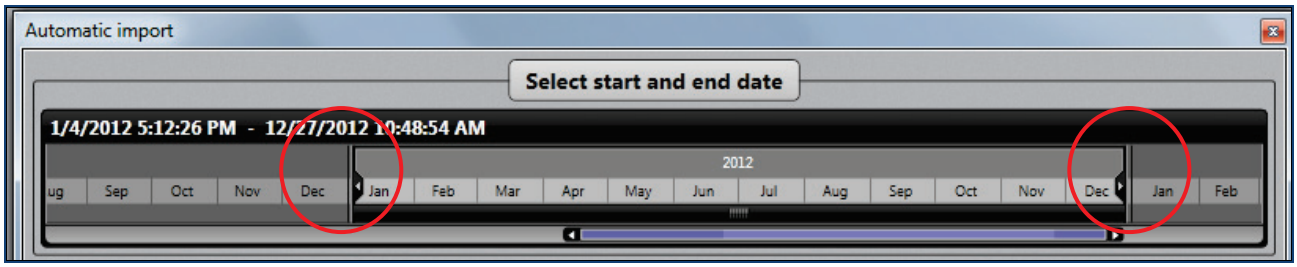




To extend the period again, the blue bar is elongated accordingly.

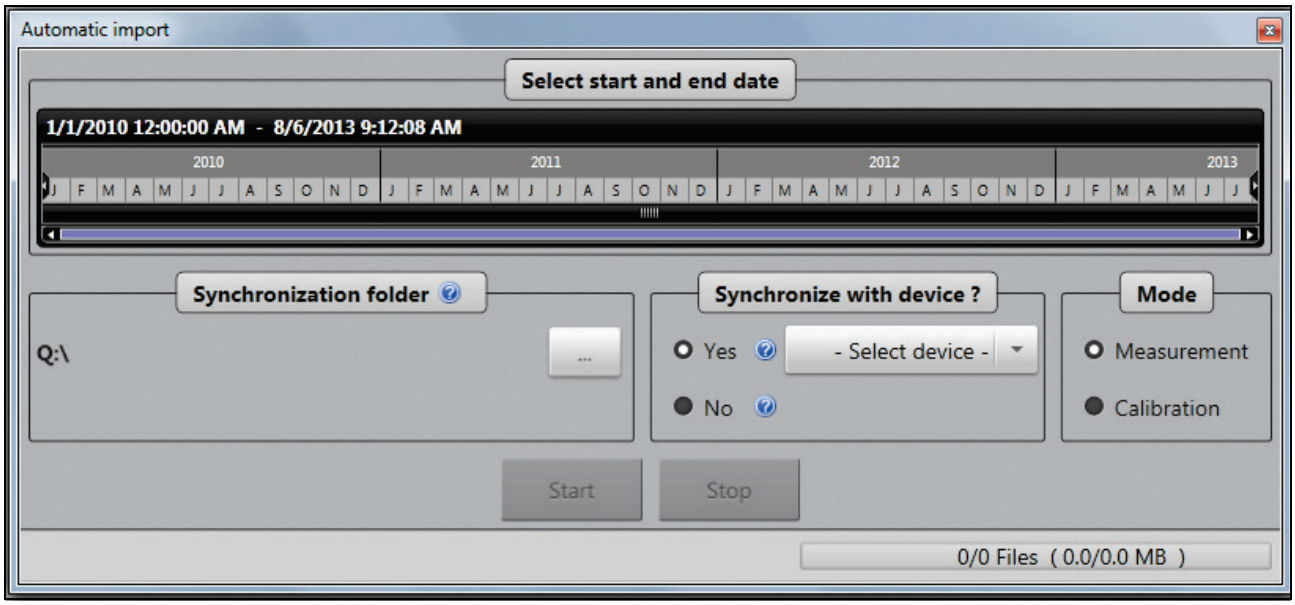


After this, the endpoints of the timeline can be moved to the desired start and end position.



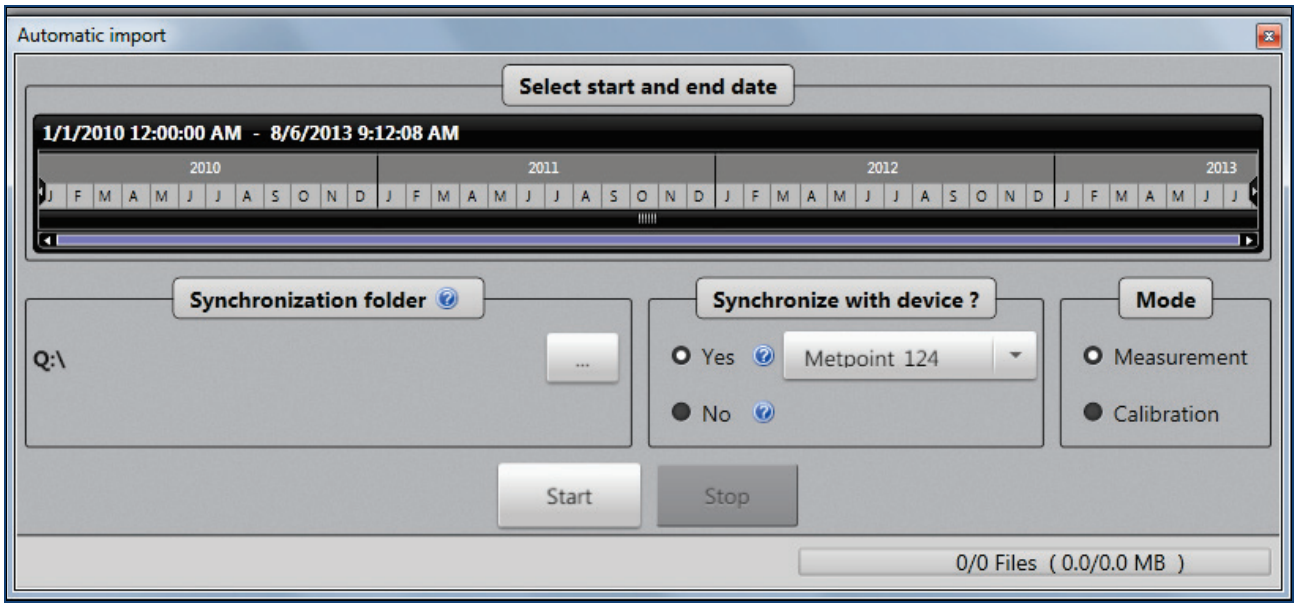
8.6.2 The AUTOMATIC IMPORT function

When selecting the AUTOMATIC IMPORT function, the following input screen appears:



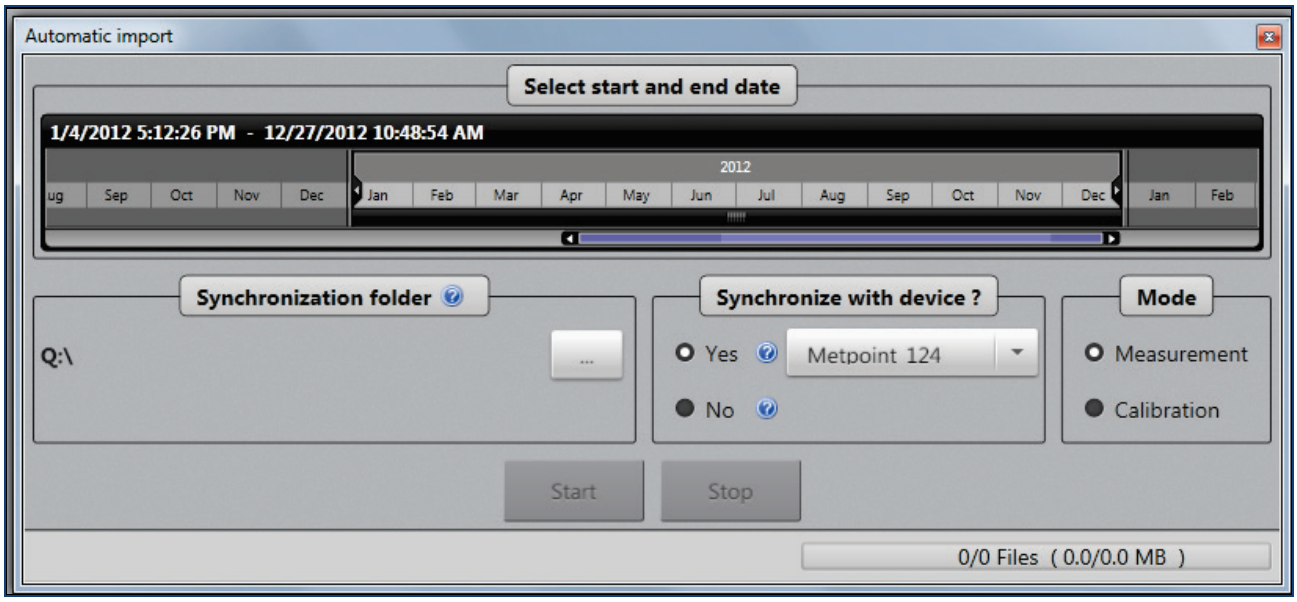
First, go to "Synchronisation Folder" to specify the storage location for saving the measurement data. Next, the program will create a subfolder with the name METPOINT XXX (e.g. METPOINT 124) in the file folder selected. The file path is indicated accordingly.

Next, go to the drop-down menu "Select Device" to select the METPOINT® OCV whose measured values you want to check.

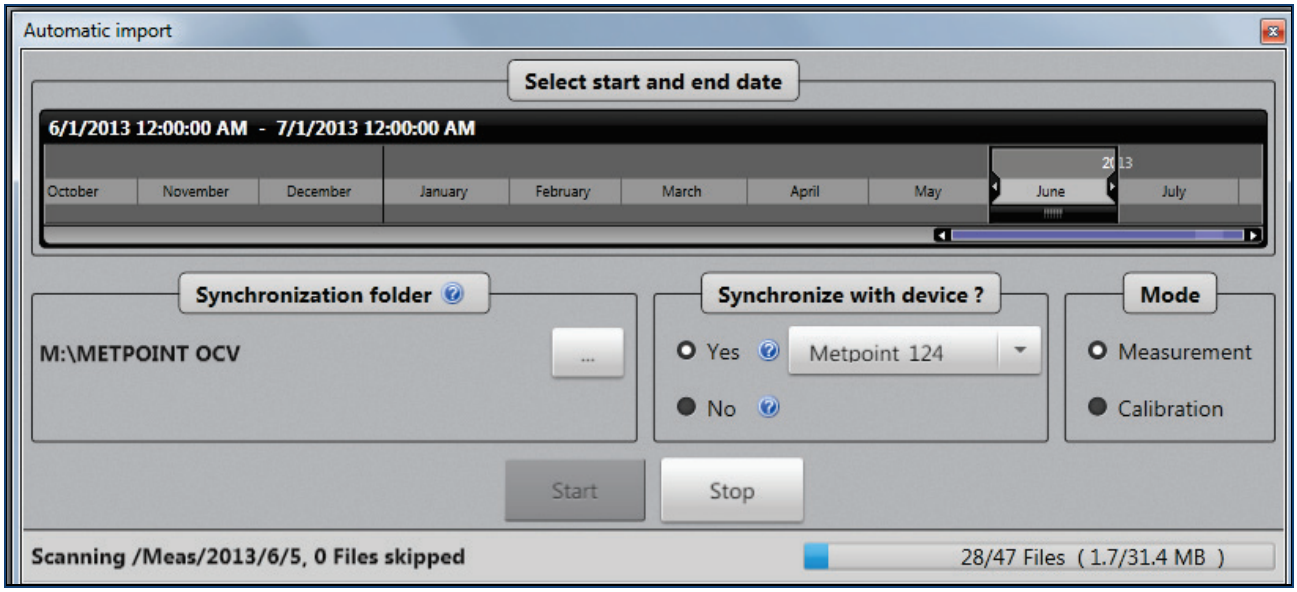


Then select Measurement in "Mode". Measurement mode is activated when the item is highlighted in white.

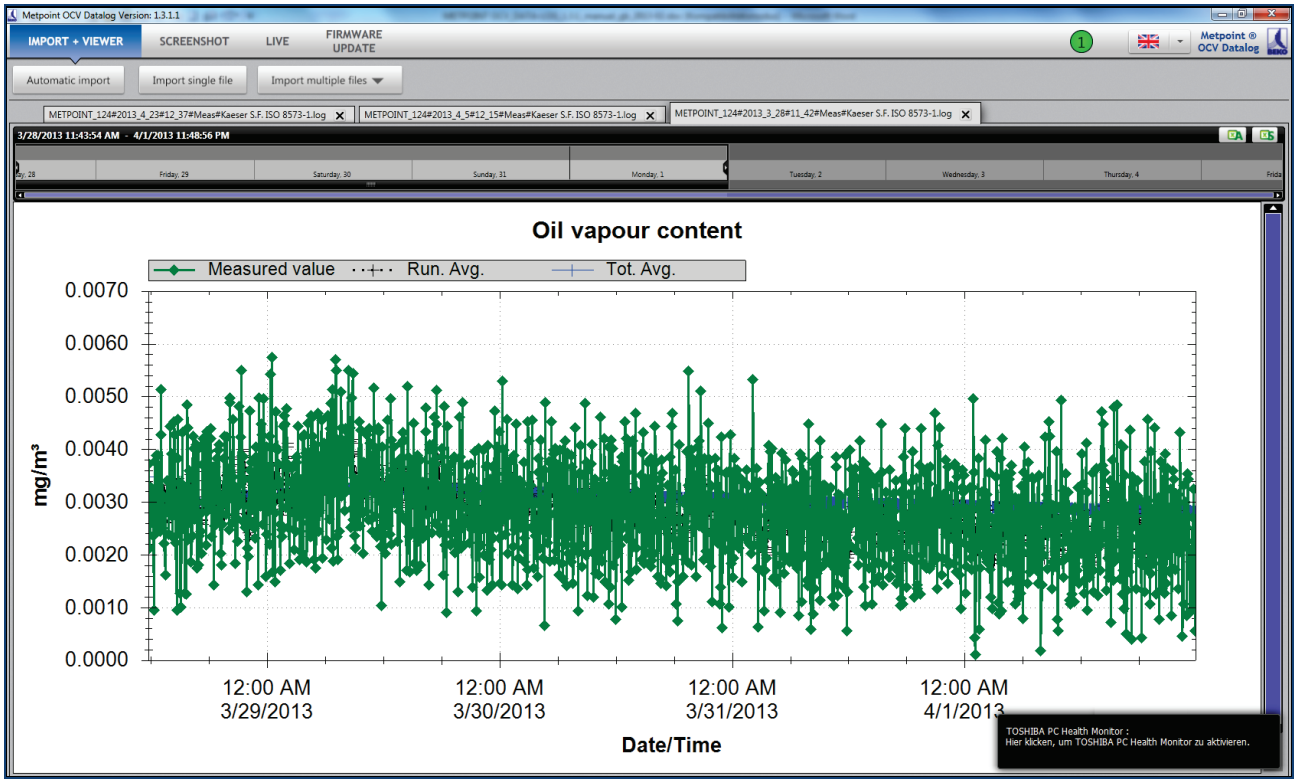
Use the timeline to select the period for which you would like to check the measured values (see chapter 8.6.1 Selection of data).



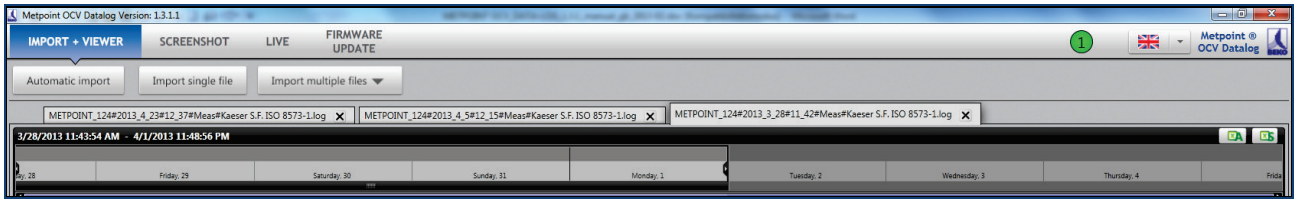
Then select "Start". Now data download is performed. You can see the progress of the download on the screen.



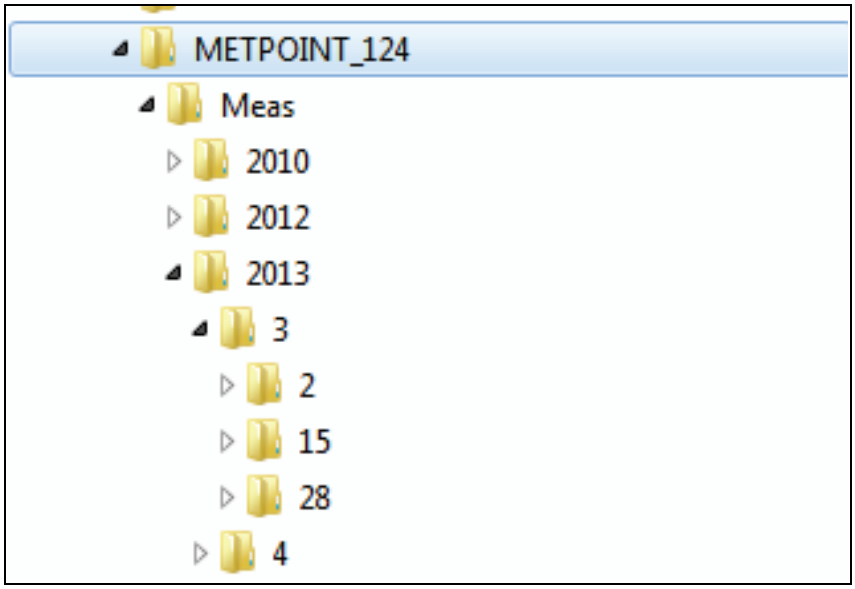
After the download is complete, the measured value file is automatically opened.



It is also possible to make several downloads in parallel. Use the file tabs to switch between the individual download views.



In addition, the log files are saved in the selected file folder.

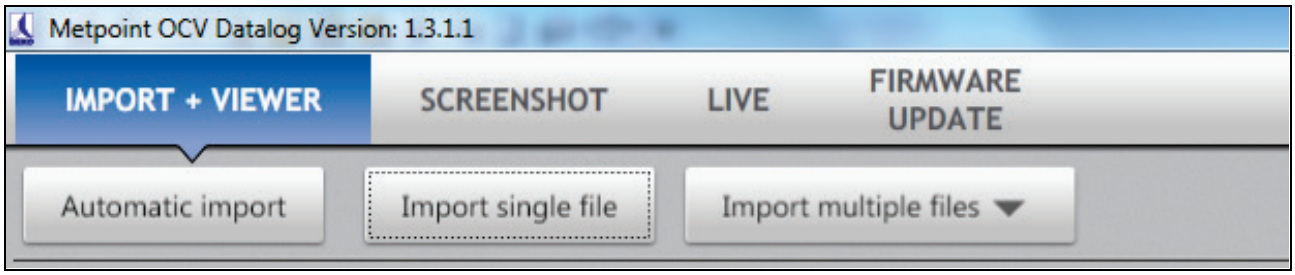


The measured values are stored under "Meas". Next, sorting is by year, month and day. A subfolder is only created if a measurement was started on the corresponding day.

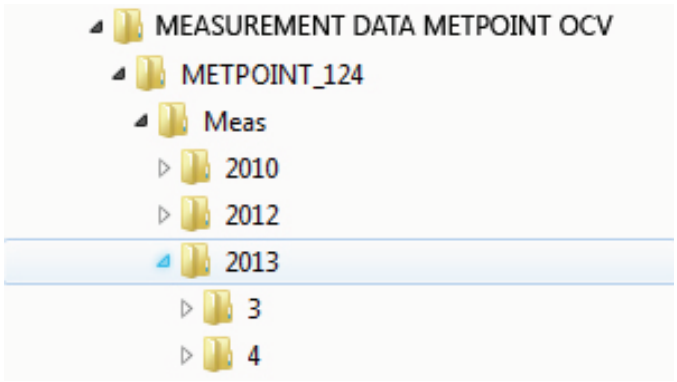
The file name begins with the start time of the measurement, followed by the [#] symbol and the substance measured.

8.6.3 The SINGLE FILE IMPORT function

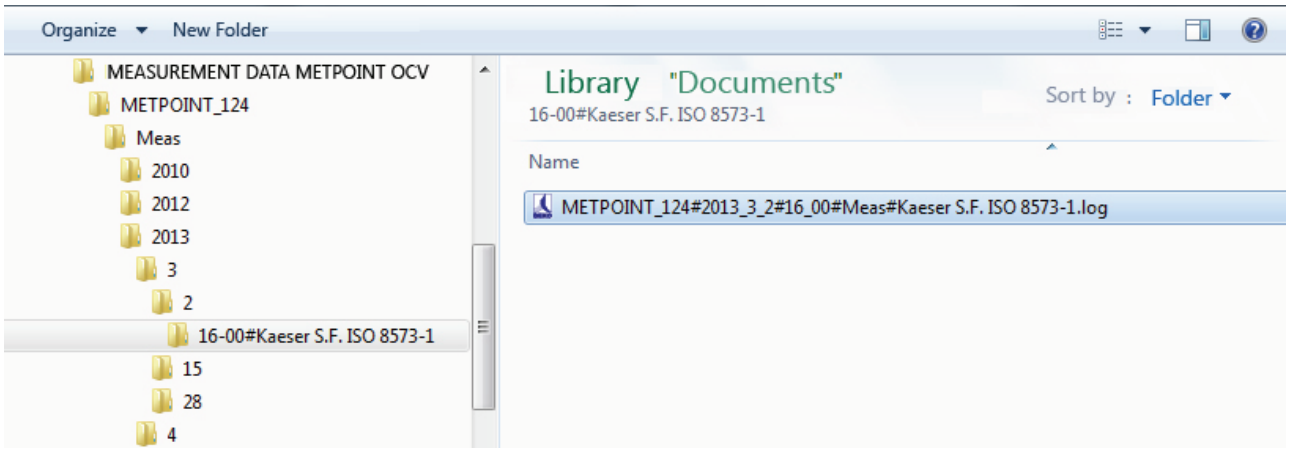
This function allows access and graphic display of saved log files.



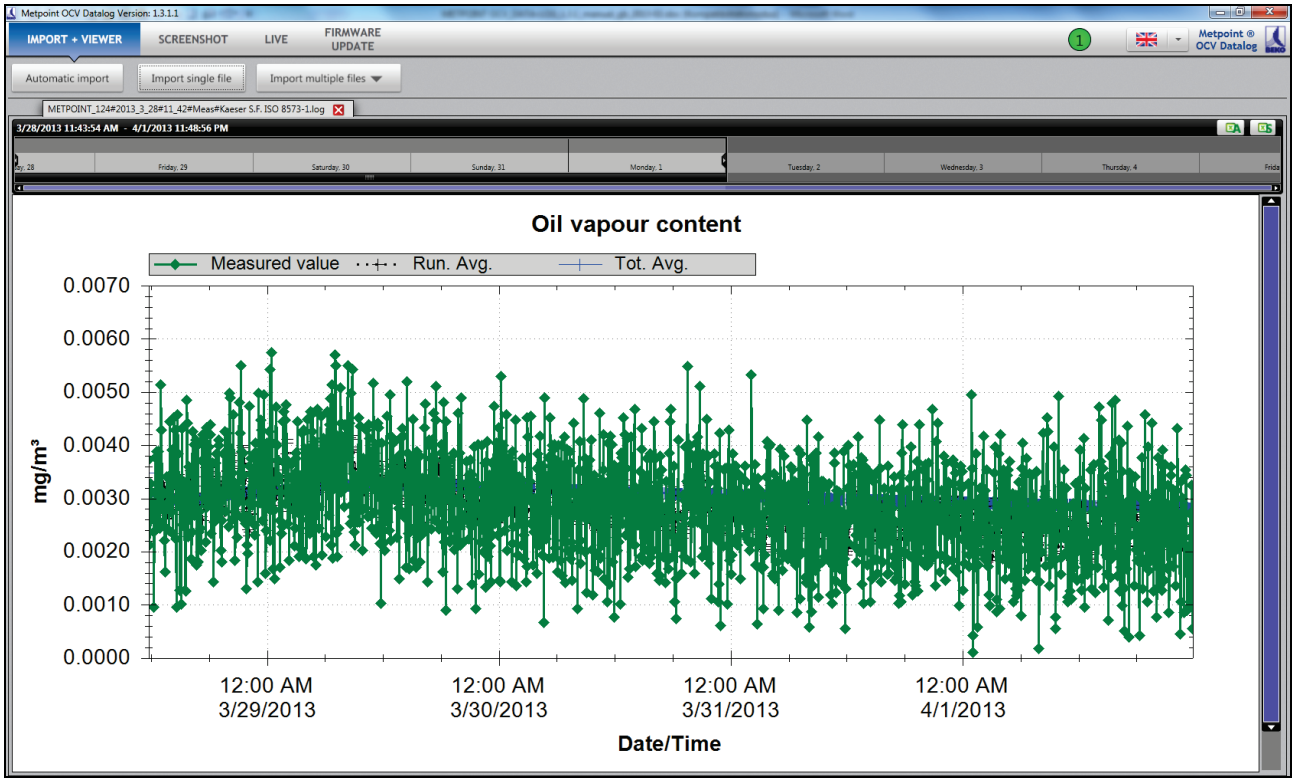
For this purpose, click on "Single File Import" and select the network path that leads to the location of your log files.



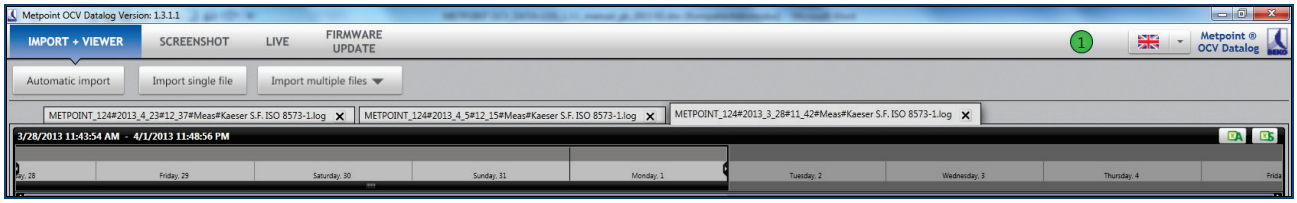
Next, select the desired file and double-click to confirm.



The file is opened and shown in diagram form.



It is also possible to perform a single import of several files. Use the file tabs to switch between the individual import screens.

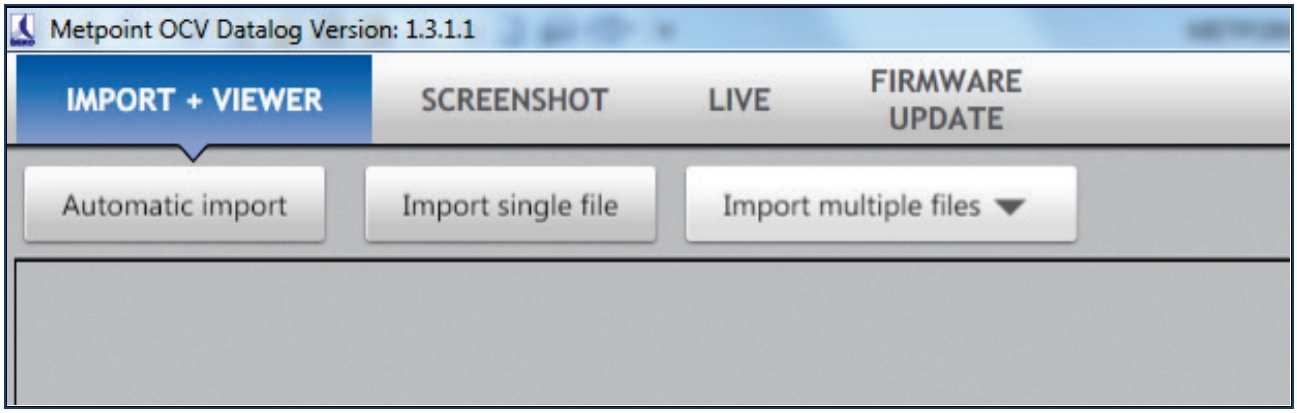


The data diagrams can be adapted by means of different functions. Also see chapter 8.3.1 Data diagram adaptation and chapter 8.6.1 Selection of data.

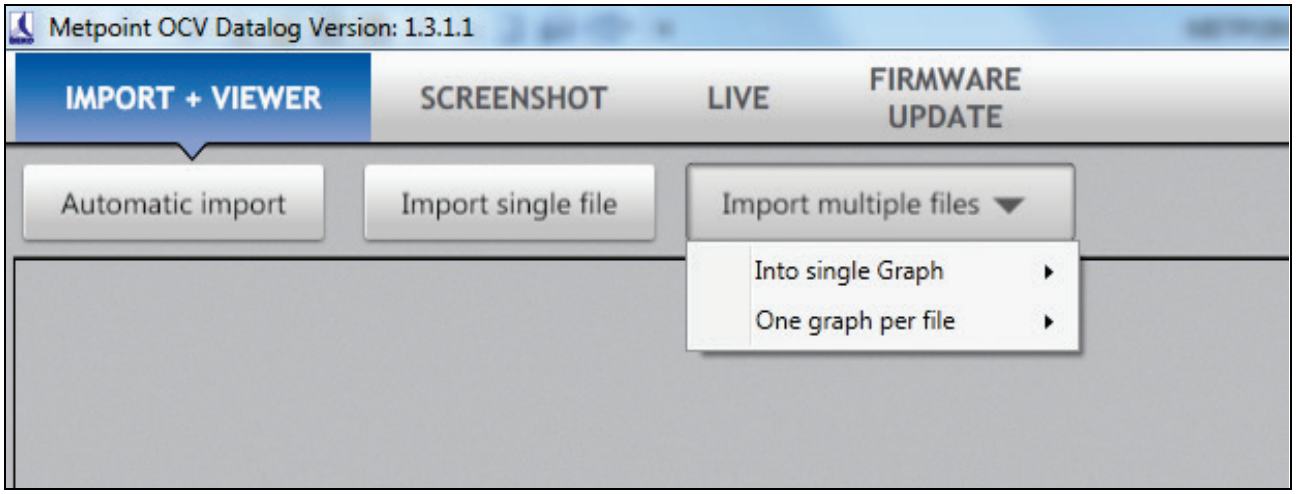
8.6.4 The MULTIPLE FILE IMPORT function

The MULTIPLE FILE IMPORT function makes it possible to import multiple measured value files, optionally into one or several diagrams.

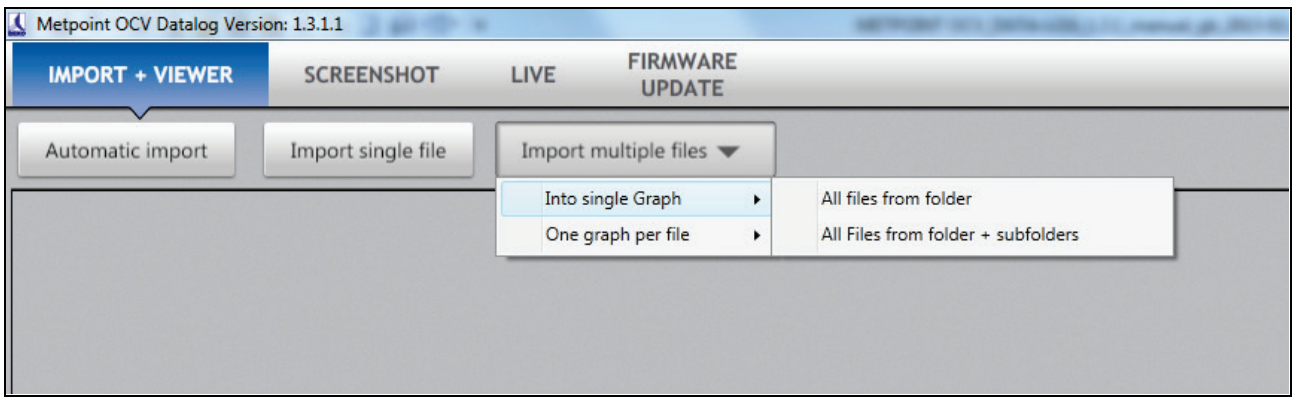
Select "Multiple File Import".



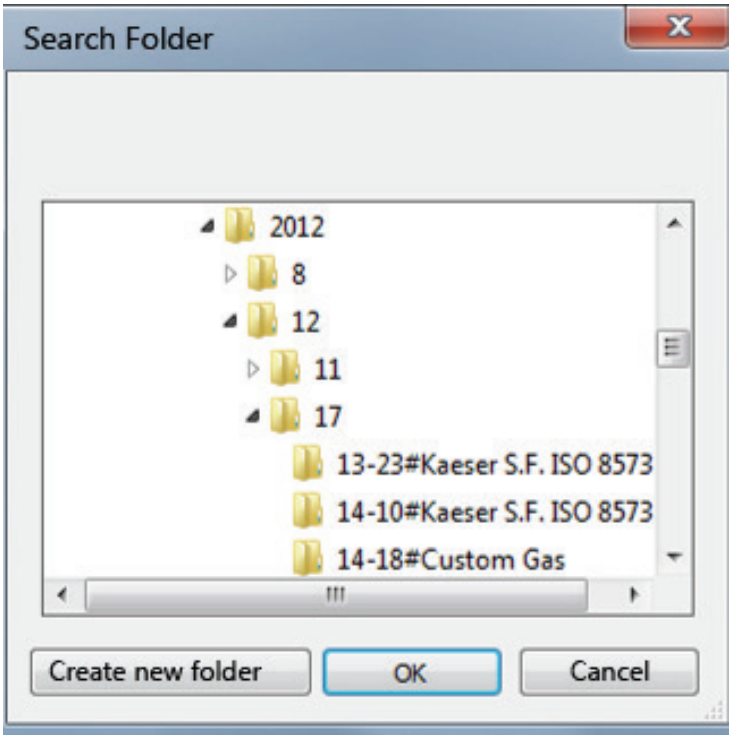
Use the drop-down menu to select whether all measured value files are to be imported into a graph, or whether a graph is to be created for each file.



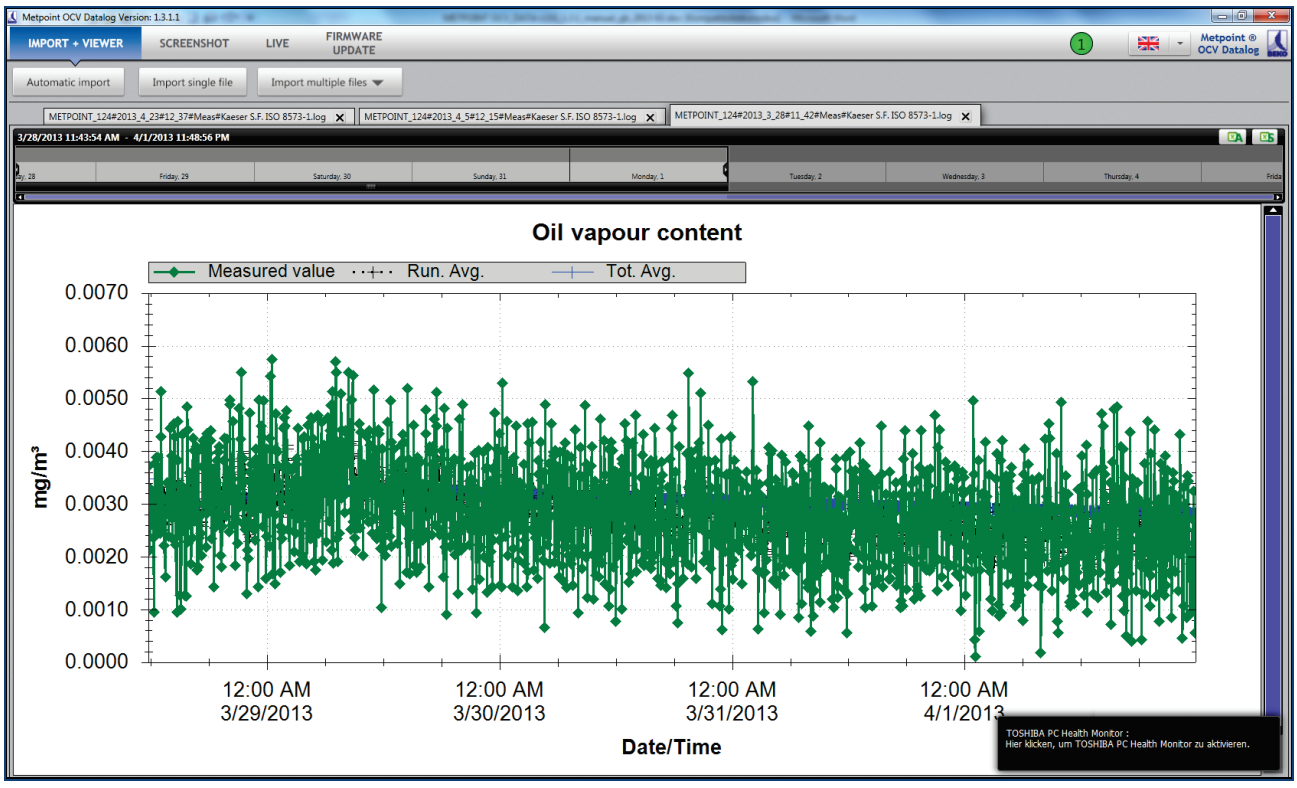
Both variants allow you to choose whether the subfolders of the file folder selected are to be included or not.



Select the desired file folder or the desired file.



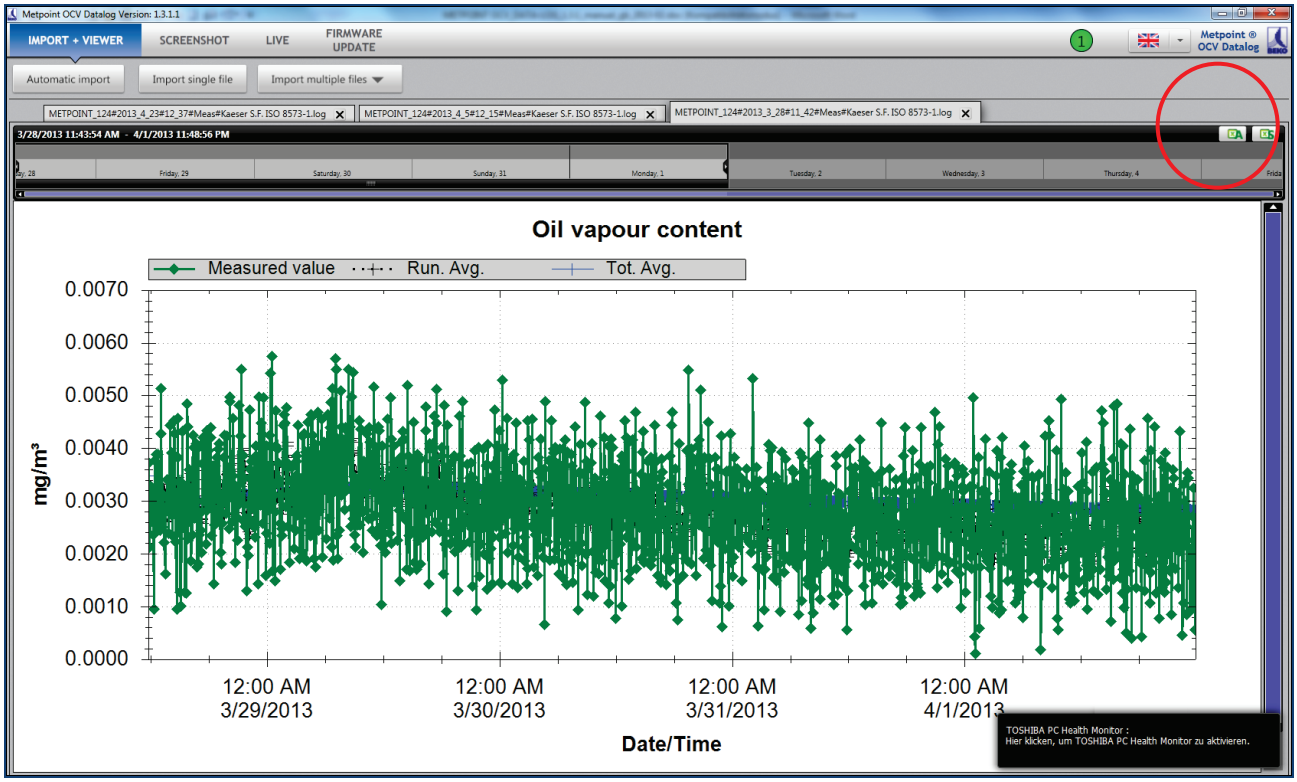
If the variant "One graph per file" has been selected, single file diagrams are displayed. Use the tabs to switch between files or delete single files.



When using the variant "All files in one graph", the data are accordingly combined, and one data diagram is displayed.

8.7 Data export in EXCEL

Generally it is possible to export the measurement data into an EXCEL spreadsheet. In the process, it is possible to select whether the entire file or the selected area is to be exported.

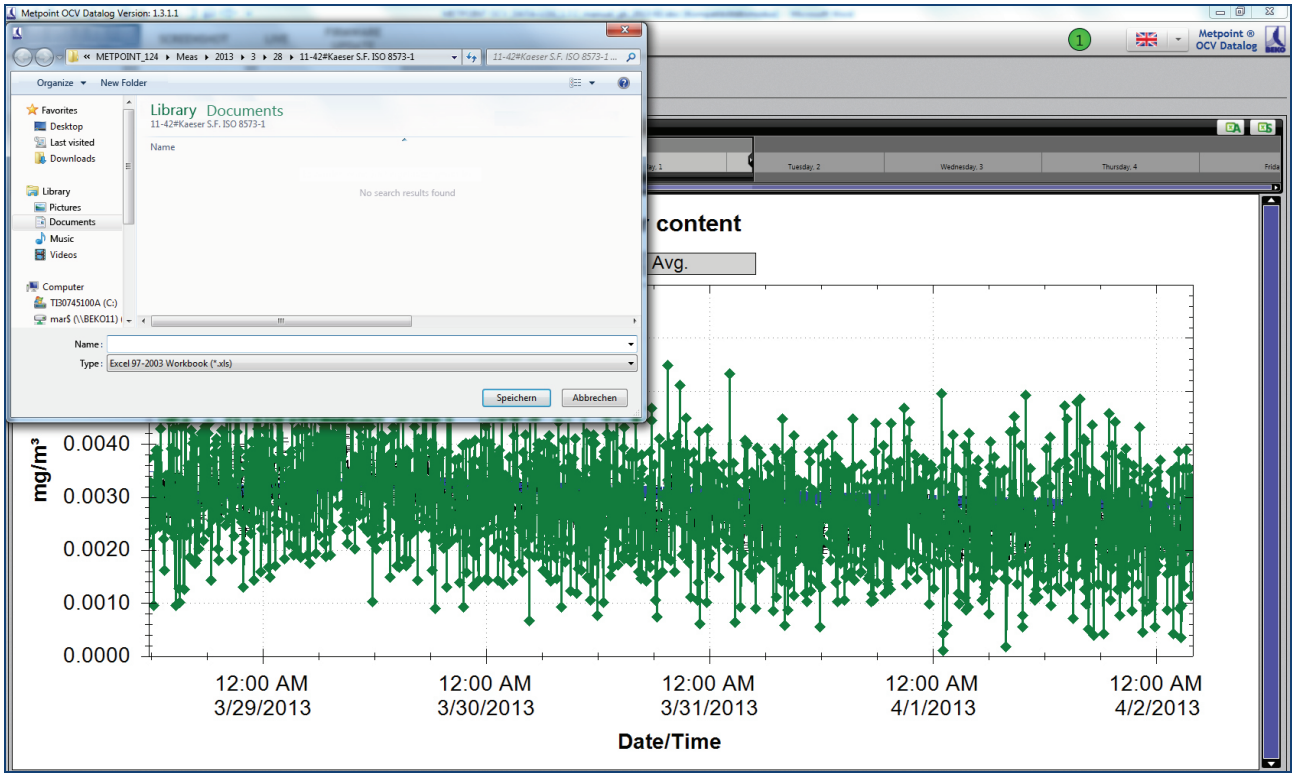


Export entire diagram into EXCEL.

Export selected area into EXCEL.

If you wish to export only parts of the data diagram, please use the timeline to select the desired area (see chapter 8.6.1 Selection of data).

To export the selected or all data, click on the corresponding symbol. Now you can specify the directory path and the file name.



To confirm this step, click on "Save"; the measurement data are then exported into an EXCEL spreadsheet.

During data export, the device number is always transferred as well. The EXCEL file can be accessed and opened like any regular file.

Example:

Measured values METPOINT_244

Date/time	Residual oil content in mg/m³
01.08.2012 04:21	0.5216
01.08.2012 04:23	0.5237
01.08.2012 04:37	0.5237
01.08.2012 04:48	0.5180
01.08.2012 04:53	0.5165
01.08.2012 04:58	0.5176
01.08.2012 05:09	0.5152
01.08.2012 05:20	0.5210
01.08.2012 05:25	0.5230
01.08.2012 05:36	0.5169
01.08.2012 05:44	0.5170
01.08.2012 05:47	0.5210
01.08.2012 06:03	0.5179
01.08.2012 06:09	0.5265
01.08.2012 06:19	0.5322
01.08.2012 06:30	0.5143
01.08.2012 06:38	0.5093
01.08.2012 06:46	0.5140
01.08.2012 06:52	0.5145
01.08.2012 07:05	0.5182
01.08.2012 07:08	0.5186
01.08.2012 07:21	0.5251
01.08.2012 07:29	0.5212
01.08.2012 07:40	0.5246
01.08.2012 07:43	0.5235
01.08.2012 07:56	0.5281
01.08.2012 07:59	0.5282
01.08.2012 08:13	0.5331
01.08.2012 08:15	0.5334
01.08.2012 08:32	0.5416
01.08.2012 08:34	0.5437
01.08.2012 08:48	0.5570
01.08.2012 08:50	0.5581
01.08.2012 09:04	0.5664

1/1

9 Service

9.1 Support on all matters concerning application

The BEKO technical service and field service teams will be happy to assist you should you have any technical questions.

In case of inquiries, please always have the serial number of your METPOINT® OCV and, if applicable, the code of the malfunction occurred available.

BEKO TECHNOLOGIES GMBH will answers any questions you might have about compressed air treatment and compressed air quality.

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Subject to technical modifications and errors.
metpoint_ocv_data-log_1.3.10_manual_en_10-044_1501_v00