

User manual:

AirflowTest-Master Reader

Management software for AirflowTest-Master wind speed and airflow meter



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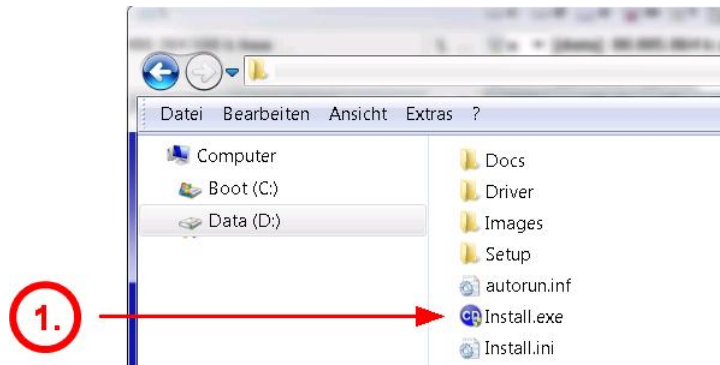
1 Installation

1.1 Basic installation procedure

The installation DVD contains all necessary files for installation:

- Special drivers setup (if necessary)
- Application setup
- Software manual

1.1.1 Start install menu from DVD



1.) Insert setup DVD and start the "Install.exe" file with Windows explorer

1.1.2 Start the driver and software installation



PC

2.) Install the hardware drivers for USB devices **BEFORE** you plug the connector to the

3.) Install the application software

4.) Open the software user manual and study the instructions carefully and/or printout

1.1.3 Connect the instrument to the PC

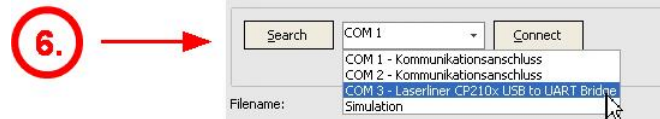
Version with direct RS232-cable:



Version with Laserliner USB-adapter cable (082.071):



1.1.4 Start the application and select the desired COM port



6.) After correct driver installation and connected and powered instrument, the new COM port should appear in the COM ports list.

1.2 Installation Driver CP211x USB-Adapter

Only the Laserliner USB-adapter 082.071 needs a driver installation.

After starting the driver installation, the driver setup dialog is shown.

1.2.1 Installation with Driver Installer

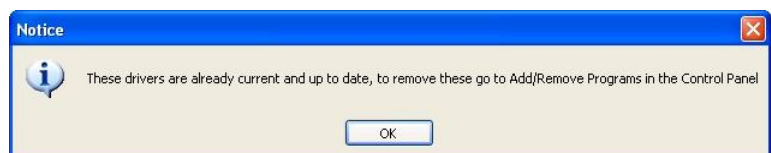


2a.) Press "**Install**" button to proceed with the driver installation process



1.2.2 Update from older driver

If you received the following message you have to uninstall the old driver version first. Please follow the instructions of the uninstall procedure in the control panel.



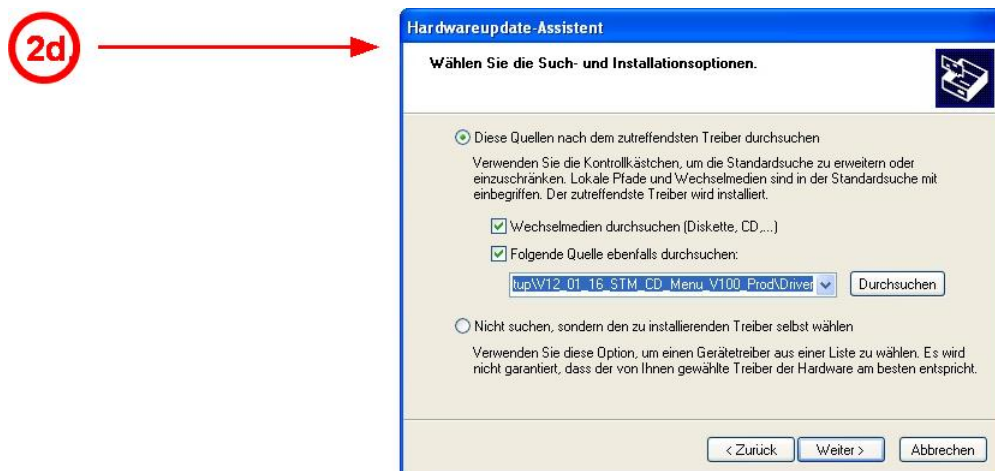
1.2.3 Plug in the USB-adapter



2b.) Plug in the USB-Adapter and power on the instrument.

1.2.4 Install from Windows hardware dialog

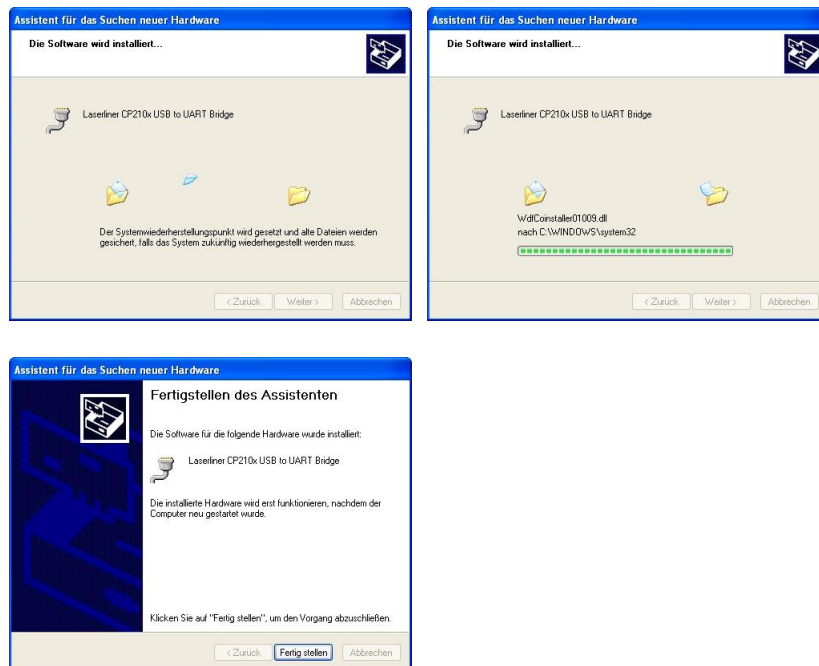
On some PC you need to proceed the hardware installation dialog after plug in the USB Adapter.



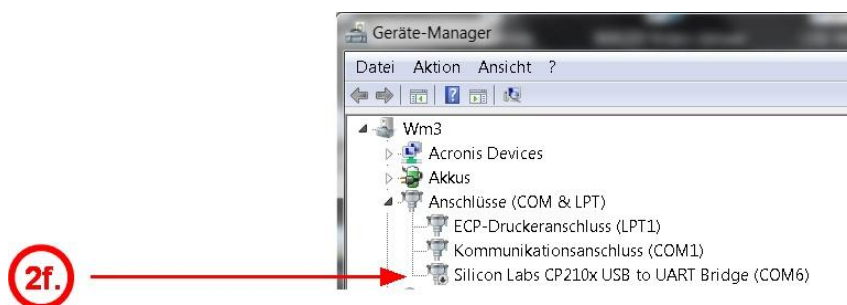
2d.) Select the path of the driver (on DVD \Driver subfolder), and proceed.



2e.) Confirm and proceed the request for security.



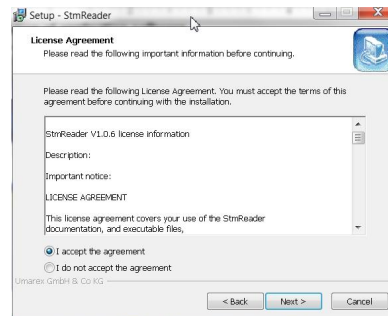
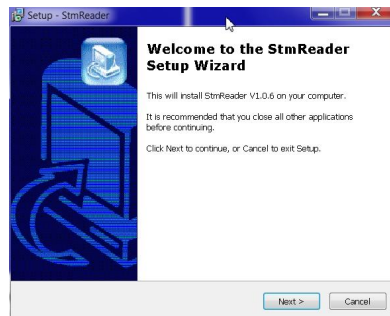
1.2.5 Check COM port after successful installation



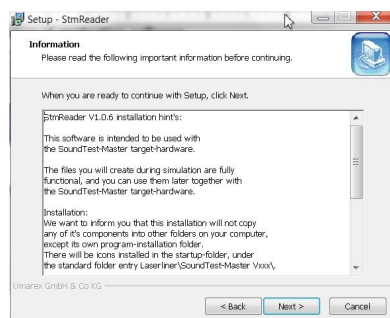
2f.) After install the new COM port must be available in the System\Hardware dialog.

1.3 Installation of application software (SetupXXX.exe)

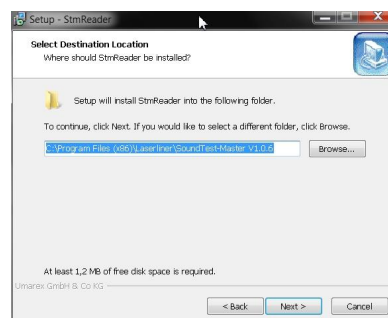
The SetupXXX.exe file includes all necessary application files, also a copy of the driver files and the manual.



Read the license agreement.



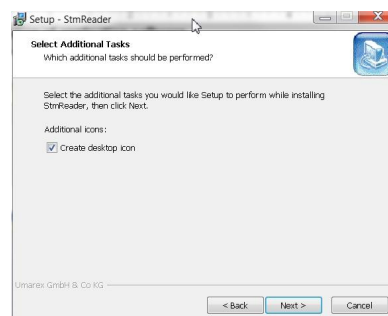
Short product information



Program installation folder



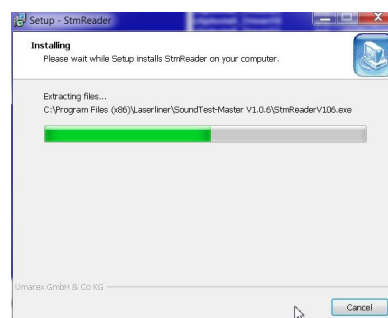
Program components



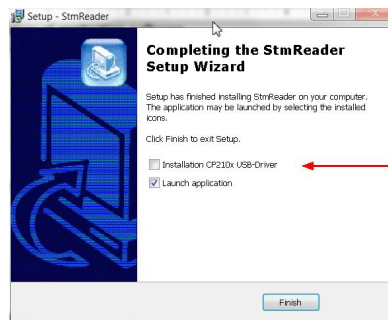
Check if a desktop icon is desired



Installation summary report



Installing the selected components ...



If driver not already pre-installed,
it can be launched from here.

Launch the driver and application before exit

2 First run

After successful installation, the application configures at first run.

You can start the program either from the Start-menu of the OS, or from the desktop-icon is you selected to create one on the user desktop.

2.1 Registration procedure

After first run the registration dialog appears.

The registration can be edited with user data and a key can be requested to receive important notifications on the application or updates.

If you don't want to register you can skip this dialog by pressing the "Continue" button.

The registration dialog box is titled "Registration Status: Not registered". It displays an "Install Code: 426A5CF575D9" and a note to "Remember this code for any further assistance". The form contains the following fields and buttons:

- User name:** John Tester (Step 1 points here)
- Company:** Umarex GmbH & Co KG
- Email:** tester@press-and-test.de
- Postal Address:** Donnerfeld 2, 59757 Arnsberg, Germa
- Registration options:**
 - REQUEST REGISTRATION KEY:** After input of the user data in the fields above, the registration key for this application will be passed to your Email address. (Step 2 points to the "1. Request Key" button)
 - REGISTER WITH A REGISTRATION KEY:** Enter Registration Key: [text field] (Step 4 points to this field; Step 3 points to the "2. Register key" button)
 - REMOVE REGISTRATION:** The Registration will be removed from this computer, this is useful if the registration needs to be proceeded a second time. If the registration cannot be re-activated, e.g. after hardware changes, please contact our support team. (Step 5 points to the "Remove" button)
 - SYNCHRONIZE REGISTRATION:** Synchronize registration data online with server. (Step 5 points to the "Synchronize" button)
- Buttons at the bottom:** "Send help request", "Help", and "Continue >>" (Step 5 points to this button)

! The registration dialog needs a valid internet connection, if this is not available you can also send the registration data with the Install Code (top left) by standard mail.

2.1.1 Enter name and valid E-Mail address

The form shows the following data entered:

- User name:** John Tester
- Company:** Umarex GmbH & Co KG
- Email:** tester@press-and-test.de
- Postal Address:** Donnerfeld 2, 59757 Arnsberg, Germa

Enter a valid E-Mail address to receive the registration key.

The "REQUEST REGISTRATION KEY" section contains the text: "After input of the user data in the fields above, the registration key for this application will be passed to your Email address." and a button labeled "1. Request Key".

Then press "Request key", to send the registration data to our server.

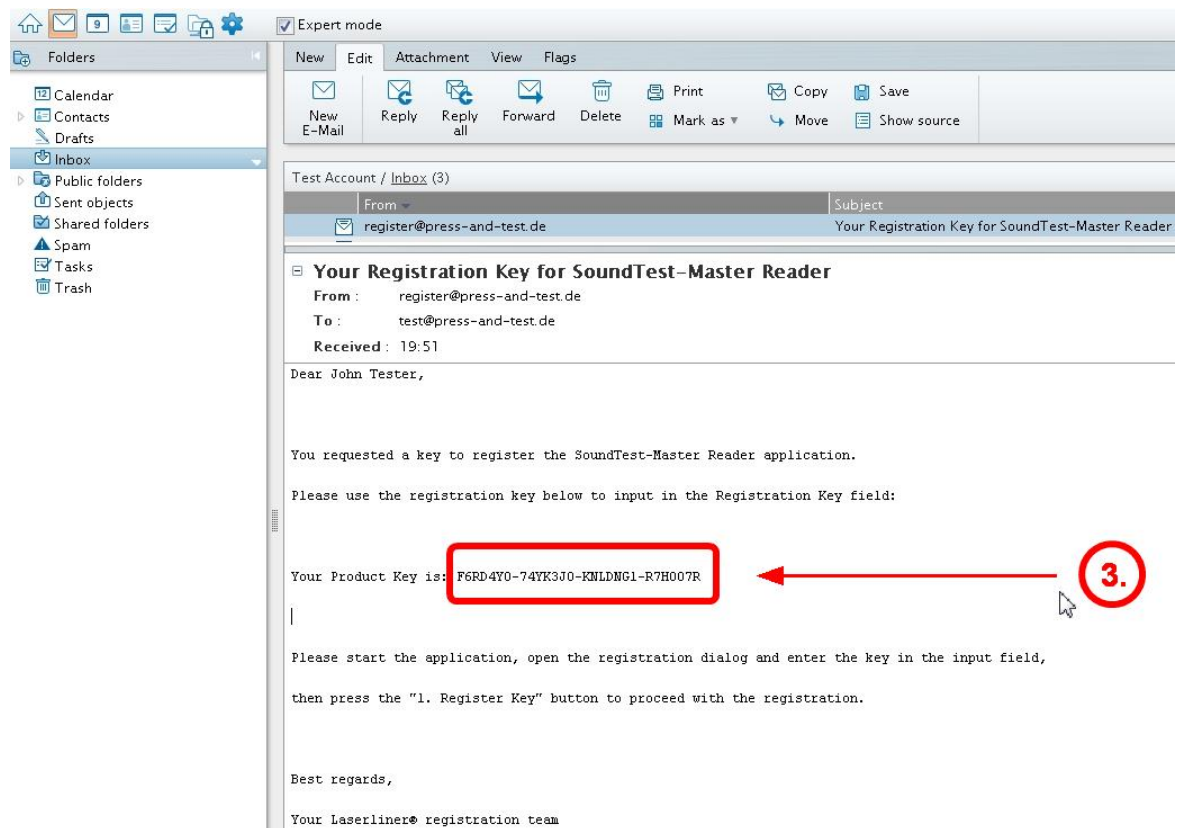
The "Information" dialog box displays the following message:

Thank you very much.
Your registration is beeing processed.
You will receive an email with your Registration Key soon.
Please use this registration key to register your application.

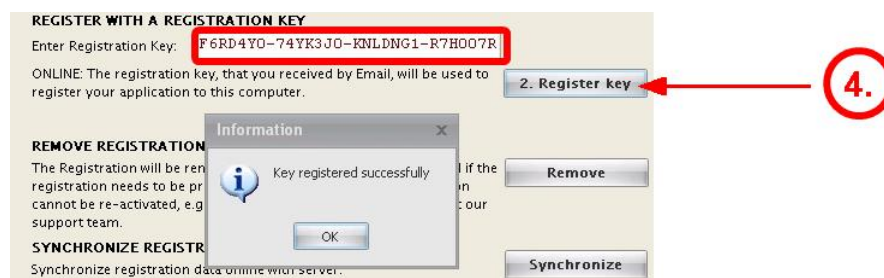
There is an "OK" button at the bottom.

This dialog notes that the registration was successful.

2.1.2 Receive a registration E-Mail from Laserliner server

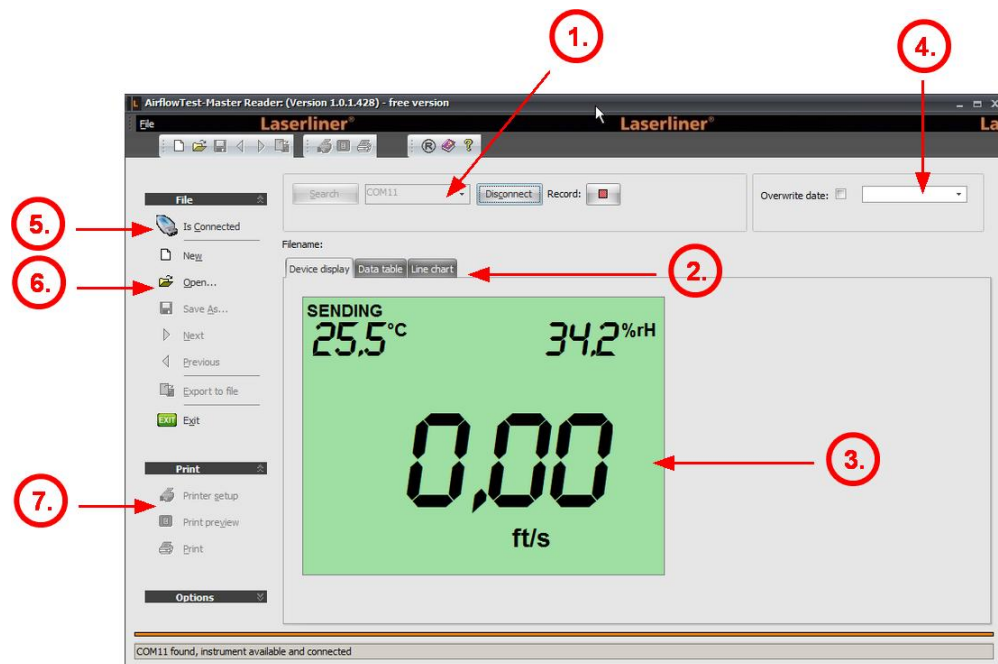


Copy and paste the "Registration key" into the Registration dialog, then press Register.



3 Basic application concepts

3.1 Overview

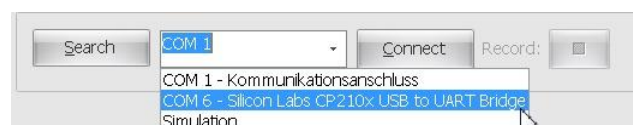


- 1.) Select the desired COM port and connect to a plugged instrument, record key to store.
- 2.) Select between the different views "Life view¹¹⁾", "Table view¹²⁾", "Chart view¹³⁾"
- 3.) The "Life view¹¹⁾" displays the actual status and values of the instrument (if instrument is connected and sending data)
- 4.) Additional parameter for data transfer
- 5.) Indicator of connected and sending instrument
- 6.) File management¹³⁾ for recorded data
- 7.) Print management¹⁶⁾ for the recorded data

3.2 Connecting the instrument

The SoundTest-Master has an unidirectional dataflow.

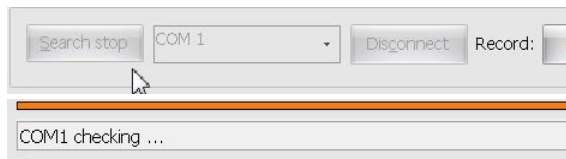
That means the software cannot control the dataflow from the instrument, but the user has to enable sending lifedata at the instrument (SENDING mode) before recording data.



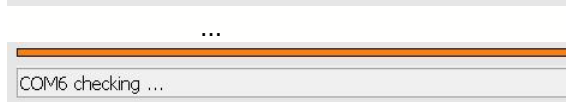
- | | |
|----------|--|
| Search | - Try to auto-search all ports and listen for incoming life data.
The instrument must be connected and in SENDING mode. |
| COM port | - The COM port can either be searched or manually selected |
| Connect | - Connect or disconnect the selected COM port.
If the instrument is not sending the Connect button will be marked red and the IsConnected symbol is greyed out.
In this case the COM port might be connected, but no dataflow from the instrument was initialized. |
| Record | - Enable / disable recording of incoming data to table and chart |

Process Auto-Search: (example)

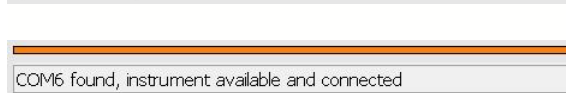
Press Search



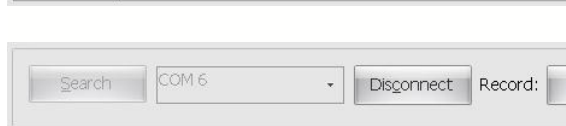
Start the search process ...



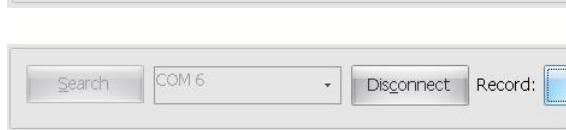
Search all available COM ports ...



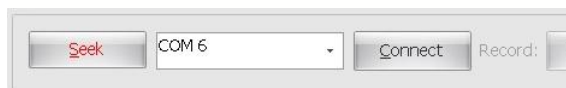
If COM port with correct signature found



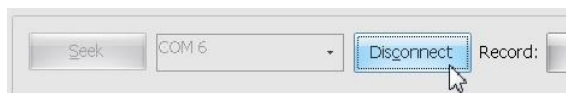
Instrument connected & data receiving



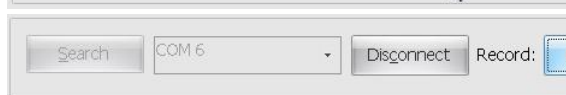
Incoming data is recorded to table & chart

If no COM port found or
no data received (no SENDING mode)Process manual connection: (example)

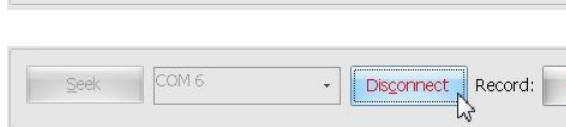
Select a COM port and press Connect



If instrument connected and data receiving

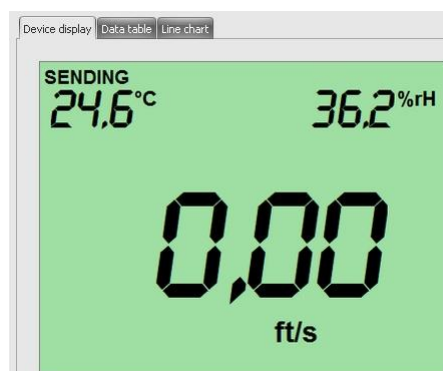


Incoming data is recorded to table & chart

COM port available but no data received
(no SENDING mode ?)

3.3 Data views

3.3.1 Life view



SENDING: if actual life data is received from the instrument

Use the date selection to overwrite the timestamp of the recorded data with the selected date.

Overwrite date: ☒ 09.04.2012

3.3.2 Table view

Device display Data table Line chart

Clear table Refresh

DT	Speed	ModeS	Temp.	ModeT	Humidity
23.04.2012 23:09:48	1,36	1	24,6	0	40,2
23.04.2012 23:09:46	1,27	1	24,6	0	40,2
23.04.2012 23:09:44	1,22	1	24,6	0	40,5
23.04.2012 23:09:42	1,09	1	24,6	0	40,5
23.04.2012 23:09:40	1,13	1	24,6	0	40,7
23.04.2012 23:09:38	1,31	1	24,6	0	40,7
23.04.2012 23:09:36	1,40	1	24,6	0	40,7
23.04.2012 23:09:36	1,40	1	24,6	0	40,7
23.04.2012 23:09:34	1,40	1	24,6	0	40,7
23.04.2012 23:09:32	1,31	1	24,6	0	40,7
23.04.2012 23:09:30	1,22	1	24,6	0	40,7
23.04.2012 23:09:28	1,40	1	24,6	0	40,7
23.04.2012 23:09:26	1,50	1	24,6	0	40,5
23.04.2012 23:09:24	1,40	1	24,6	0	40,2

Clear table: Clears the complete data memory for table and chart.

Refresh: Refreshes the display.

3.3.2.1 Navigator

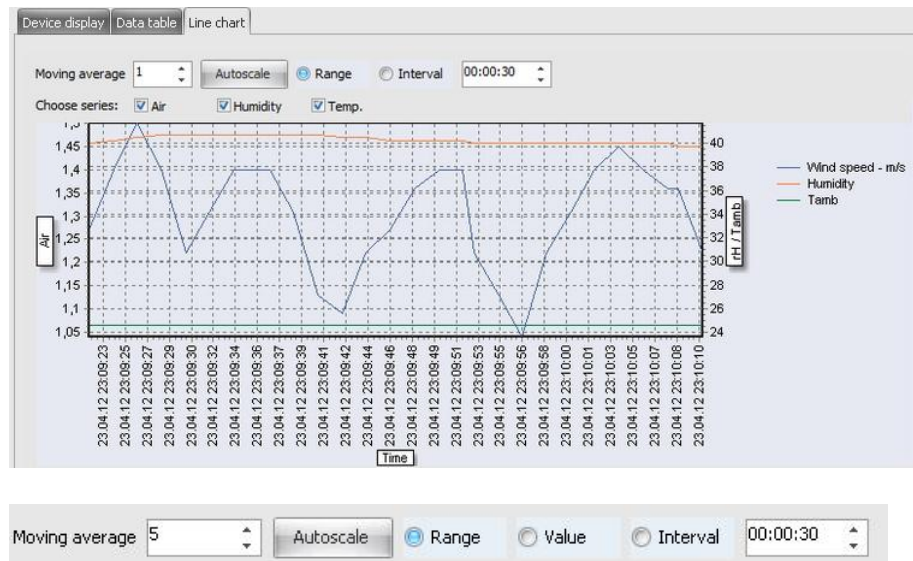
The Navigator at the table bottom is used for data manipulation and filtering:

29.03.2012 21:27:04	50,5 A	FAST			30	80
29.03.2012 21:27:05	55,2 A	FAST			30	80

1 of 138

- ⏮ - Move data cursor to first data record
- ⏪ - Move data cursor to the previous page
- ⏩ - Move data cursor to the previous data record
- ⏭ - Move data cursor to the next data record
- ⏮ - Move data cursor to the next page
- ⏭ - Move data cursor to last data record
- ⊕ - Add a data record to the table manually
- ⊖ - Delete a data record from the table
- ⬆ - Edit the selected data record
- ✓ - Confirm the edited changes
- ✗ - Cancel the edited changes
- 🔍 - Apply a user filter to the table

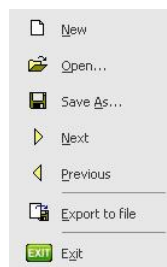
3.3.3 Chart view



- Moving average - Adds an additional averaging trendline to the chart (when set to 1 the average line is removed)
- Autoscale - Forces a redraw of the following scaling options
- Range - Scales over the full data range (including Min/Max levels)
- Interval - Scales over a defined time-range from the last value
- Choose series - Select which curves to be shown in the chart

3.4 Load and save files

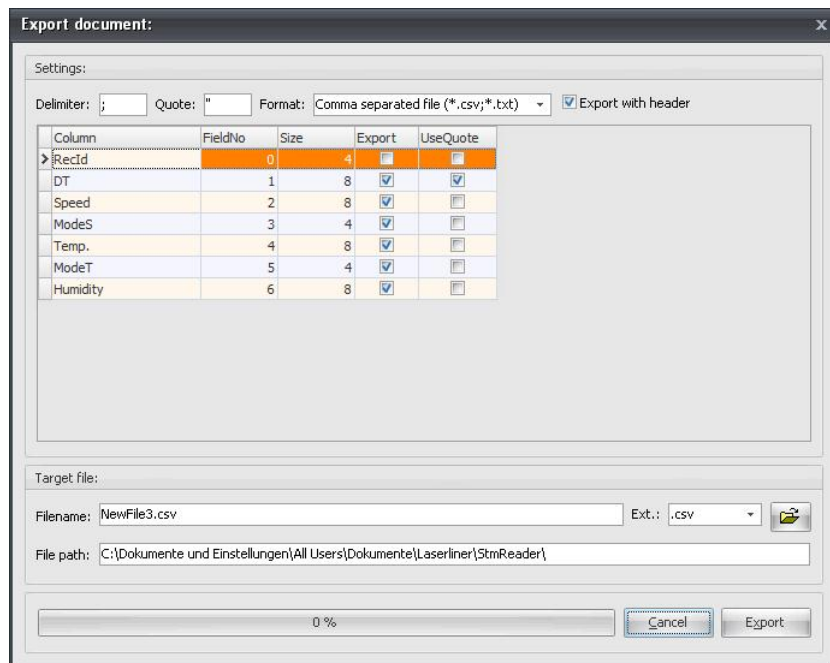
3.4.1 File manipulation



- New (file): Clear the actual document and prepare for a new data file
- Load (file): Selects and loads an existing data file from local drive
- Save as (file) Saves the actual document to the local drive
- Next (file) Selects and loads the next file in the actual folder
- Previous (file) Selects and loads the previous file in the actual folder
- Export to file [Exports](#)^[14] the actual document to CSV or XML format

3.4.2 Export document

Configuration of the export parameters.

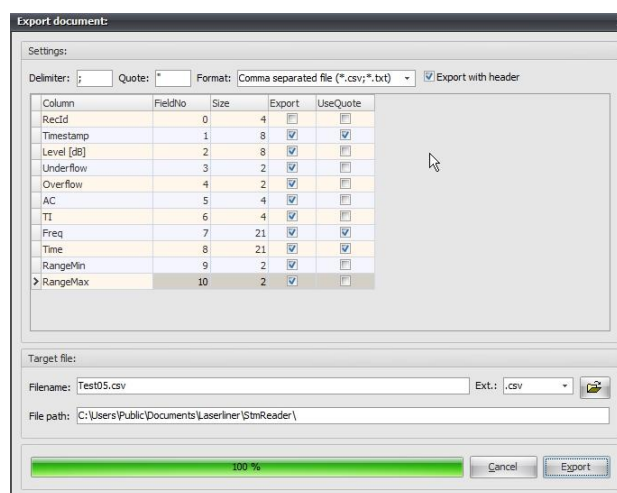


- Delimiter** - Defines the actual column delimiter character in the output CSV file
- Quote** - Defines the actual column quote character in the output CSV file
- Format** - Selectes the available export foirmats (CSV, XML, ...)

Column parameters:

- Column** - Name of the underlying dataset columns
- Field no** - The index of the underlying dataset columns
- Size** - Size of the columns datatype
- Export** - Choose which selection of columns should be exported
- UseQuote** - Choose which selection of columns should be quoted
(In the header all columns are quoted)

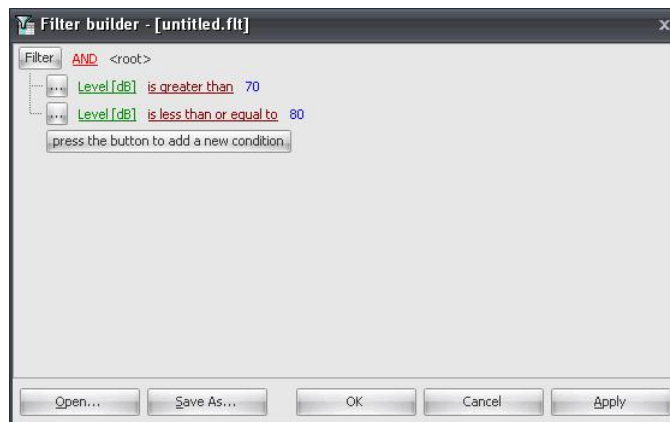
Select filename with file extension and press the Export button to export the whole dataset:



3.5 Filter data

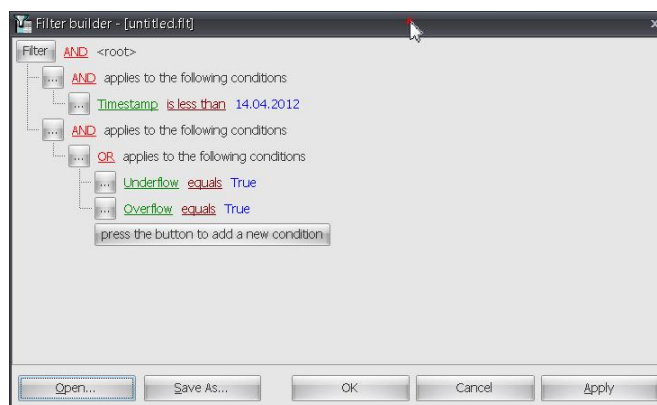
3.5.1 Open and edit a data filter

In the table view the filter symbol [] is used to open a custom filter.



- Add new ... - to add and edit a new filter condition
- Open - to open previously saved filter definitions
- Save as - to save the actual filter definition to the local drive
- Apply; OK - to apply the filter to the dataset and finish the dialog

A complex filter term can be constructed by adding group terms:



3.6 Print table and chart reports

3.6.1 Overview



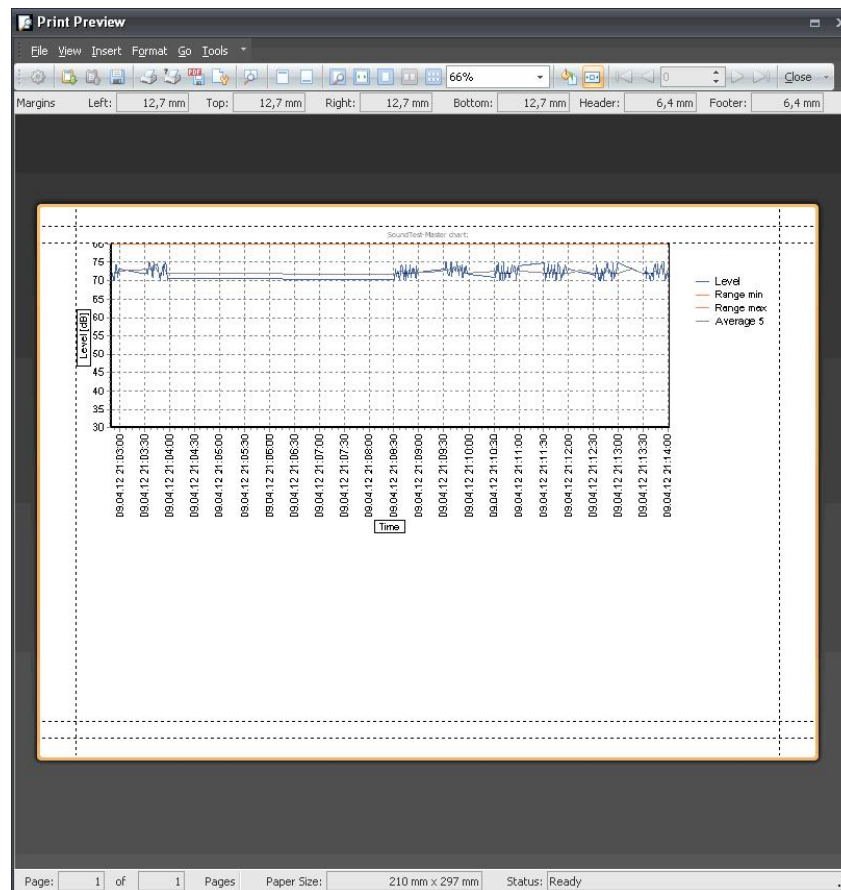
The print system activates the right report type according to the selected view. The reports can be previewed and set up with the Print preview function.

For table view the table report is shown:

The Print Preview window displays a table report for 'NewFile3.dat'. The table has 8 columns: Timestamp, Level [dB], Freq, Time, Underflow, Overflow, RangeMin, and RangeMax. The data is organized into 20 rows, each representing a measurement at a specific timestamp. The Level [dB] values range from 70.1 to 74.8, and the Freq values are all 'A'. The Time column shows 'SLOW' for all entries. The Underflow and Overflow columns contain checkboxes, all of which are currently unchecked. The RangeMin and RangeMax columns show values of 30 and 80, respectively, for all entries.

Timestamp	Level [dB]	Freq	Time	Underflow	Overflow	RangeMin	RangeMax
09.04.2012 21:13:59	70,5	A	SLOW	☐	☐	30	80
09.04.2012 21:13:58	71,8	A	SLOW	☐	☐	30	80
09.04.2012 21:13:57	72,8	A	SLOW	☐	☐	30	80
09.04.2012 21:13:56	70,7	A	SLOW	☐	☐	30	80
09.04.2012 21:13:55	70,1	A	SLOW	☐	☐	30	80
09.04.2012 21:13:54	74,8	A	SLOW	☐	☐	30	80
09.04.2012 21:13:53	71,6	A	SLOW	☐	☐	30	80
09.04.2012 21:13:52	74,6	A	SLOW	☐	☐	30	80
09.04.2012 21:13:51	73,7	A	SLOW	☐	☐	30	80
09.04.2012 21:13:49	72,9	A	SLOW	☐	☐	30	80
09.04.2012 21:13:48	71,0	A	SLOW	☐	☐	30	80
09.04.2012 21:13:47	72,6	A	SLOW	☐	☐	30	80
09.04.2012 21:13:46	74,5	A	SLOW	☐	☐	30	80
09.04.2012 21:13:45	71,7	A	SLOW	☐	☐	30	80
09.04.2012 21:13:44	74,5	A	SLOW	☐	☐	30	80
09.04.2012 21:13:43	74,4	A	SLOW	☐	☐	30	80
09.04.2012 21:13:42	72,6	A	SLOW	☐	☐	30	80
09.04.2012 21:13:41	70,4	A	SLOW	☐	☐	30	80
09.04.2012 21:13:40	71,9	A	SLOW	☐	☐	30	80
09.04.2012 21:13:39	72,3	A	SLOW	☐	☐	30	80
09.04.2012 21:13:38	70,1	A	SLOW	☐	☐	30	80
09.04.2012 21:13:37	71,1	A	SLOW	☐	☐	30	80
09.04.2012 21:13:36	71,0	A	SLOW	☐	☐	30	80

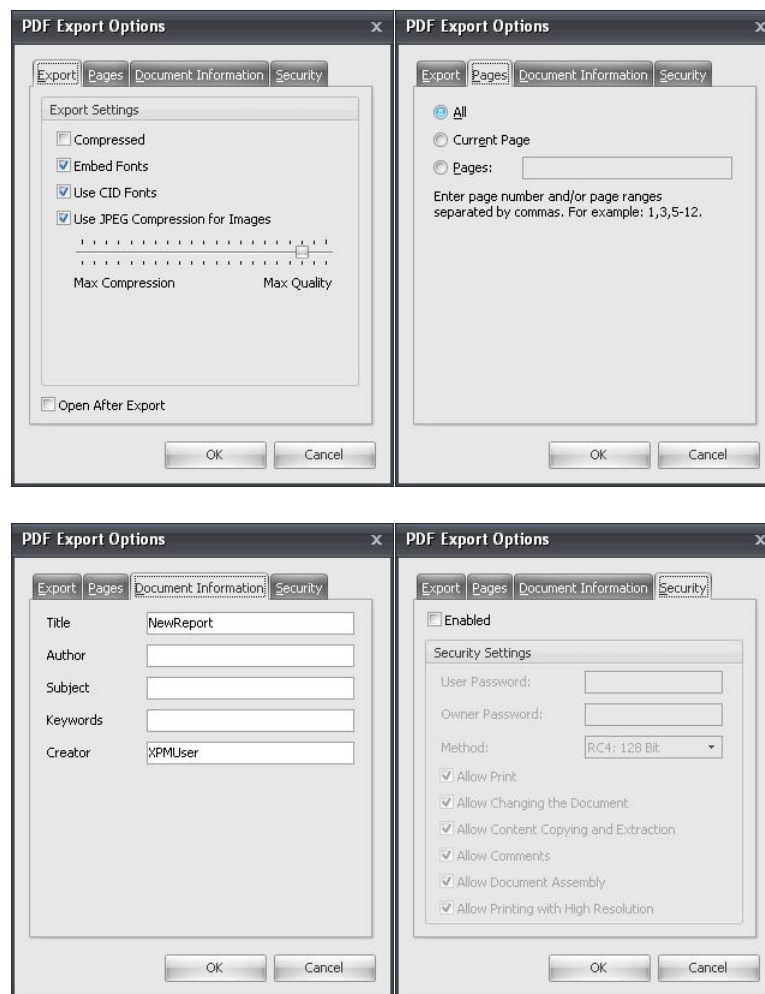
For the chart view the chart report is shown:



3.6.2 Report options



- Load/Save: Active report can be stored and re-loaded from local harddrive
- Print: Active report can be printed from the report print preview
- Export to PDF: Active report can be exported as PDF file, with additional PDF options:



Zoom options To fit document to paper, to print and view on one or several pages.

Title option Allows adding a report title

Footnote option Allows adding report footnotes

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