NCTE Sensors

User manual

1.1.4

Content

1. Basics

The developed software allows the user to transfer data from the sensor via a USB cable to the PC and display. It is also possible to record the data, to compare and determine the data rate.

1.1. System requirements

The following requirements are necessary to perform NCTE sensor on your PC:

- 1-GHz-Processor or higher with 32 Bit (x86) or 64 Bit (x64)
- 1 GB RAM (32-Bit) or 2 GB RAM (64-Bit)
- 50 MB available hard drive storage (32-Bit and 64-Bit)
- USB 2.0
- Connection to internet for product activation

1.2. Driver installation

Before the program can be used, the driver for the sensor must be installed. Therefore switch to the entry ***Driver*** in the ***Sensor*** menu and click it. The driver will be installed automatically. After installing the driver, you have to reconnect the sensor for a correct system loading of the driver.

1.3.Menu

1.3.1. Sensor

1.3.1.1. Details

If a sensor is connected, serial number, measurement range and hardware id of the sensor will appear. Otherwise a message shows that no sensor is connected.

1.3.1.2. Driver

(See description on section 1.1)

1.3.2. Settings

1.3.2.1. Language

The program is available in German and English. Change it in the language settings.

1.3.2.2. Time unit

Time unit for measuring duration of the current measurement

- hh:mm:ss,f
- Seconds
- Minutes
- Hours

1.3.2.3. Recording

Recording specific settings, such as Directory to save Screenshots, file name, additional statistical values

- Include statistics: Min, Max, Average and Diff from every signal are written to the .csv-File
- Serial number: add serial number to filename
- Measurement Range: add measurement range to filename
- Date: add date to filename
- Time: add time to filename

1.3.2.4. Screenshot

A picture of the current screen is saved. By default the screenshot is stored in the user directory NCTE Sensors/Screenshots

1.3.2.5. Reset program to default values

All changed values will turn to delivery condition.

1.3.3. View

1.3.3.1. Full screen

The program window turns into full screen mode.

1.3.3.2. Advanced mode

For more information see section 2.

1.3.3.3. Navigation bar

For more information see section 1.3

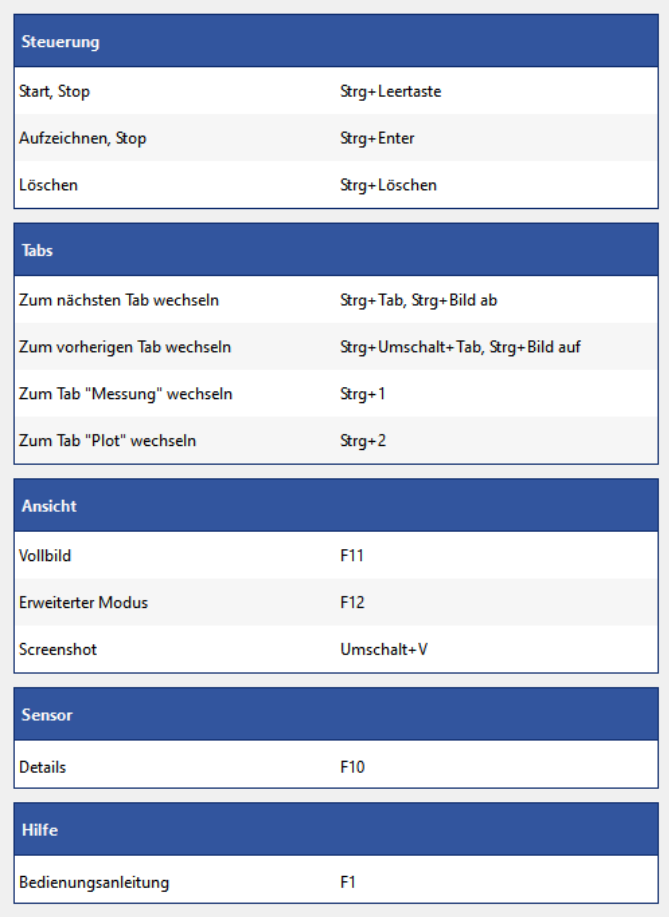
1.3.4. Help

1.3.4.1. User manual

Depending on the program language a German or English version of the user manual will appear.

1.3.4.2. Shortcuts

Click the entry ***Shortcuts*** in the ***Help*** menu to get a view of all shortcuts.



Steuerung	
Start, Stop	Strg+Leertaste
Aufzeichnen, Stop	Strg+Enter
Löschen	Strg+Löschen

Tabs	
Zum nächsten Tab wechseln	Strg+Tab, Strg+Bild ab
Zum vorherigen Tab wechseln	Strg+Umschalt+Tab, Strg+Bild auf
Zum Tab "Messung" wechseln	Strg+1
Zum Tab "Plot" wechseln	Strg+2

Ansicht	
Vollbild	F11
Erweiterter Modus	F12
Screenshot	Umschalt+V

Sensor	
Details	F10

Hilfe	
Bedienungsanleitung	F1

1.3.4.3. Contact

In this menu contact data of NCTE AG is displayed.

1.3.4.4. About

Developer and software information is displayed.

1.4. Navigation bar

The navigation bar provides functions to interact with the sensor and includes the sensor state. Using the navigation bar, you can consider different views in the program.

1.4.1. Sensor state

A successful connection to the sensor is established. Information about the sensor will be shown by clicking this button. (See section 1.2.1.1)

No sensor connected.

Data transfer between sensor and sensor program.

1.4.2. Buttons

Start
Starts the reading of the data from the sensor.

Recording
Starts the measurement and saves it automatically to a CSV file.

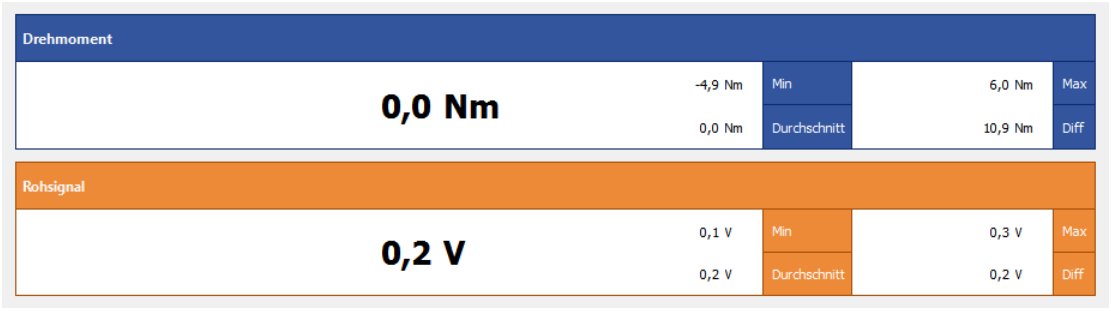
Stop
Stops the reading of the data from the sensor.

Clear
Deletes already read data, unless they have been recorded.

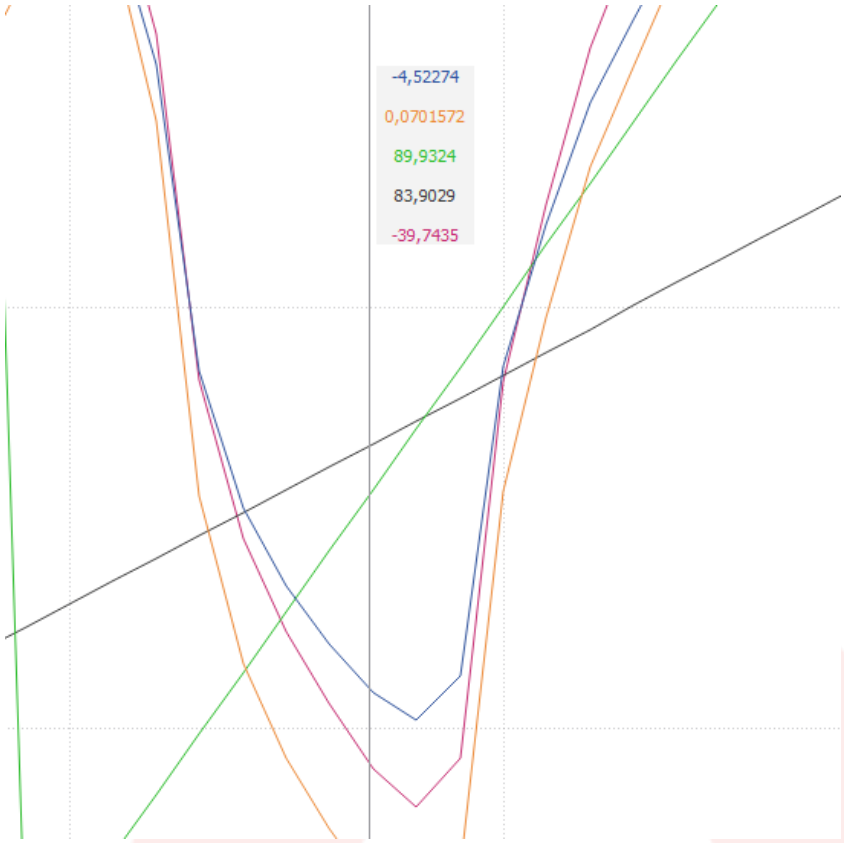
1.4.3. Views

Measurement
All signals of the sensor are displayed in an overview. In addition a minimum and maximum value of the current measurement can be visualised for each signal. Depending on the sensor average and difference values are also shown.

For specific settings, see advanced mode.



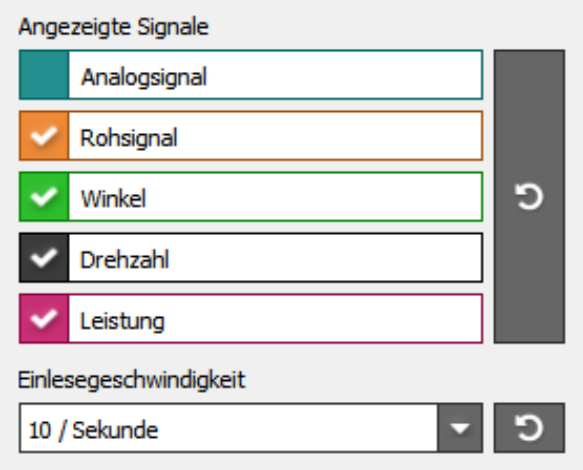
Plot



For specific settings, see advanced mode.

2. Advanced mode

In advanced mode, more features are available. In both views, the visibility of the signals can be toggled by using the check boxes. The sample rate controls how often data will be read from the sensor.



2.1. **Measurement**

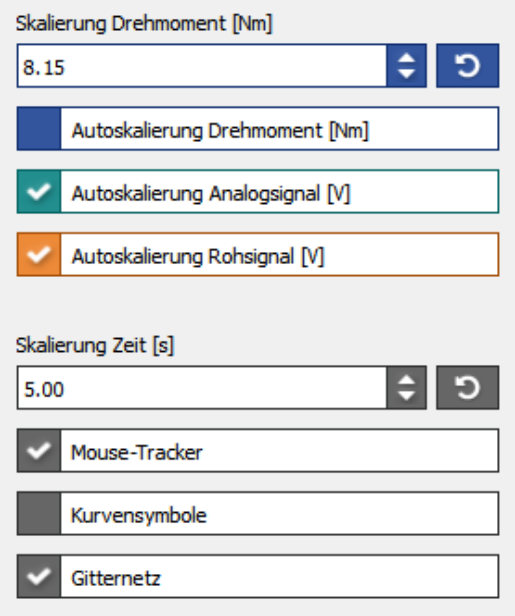
The following properties of the measurement for the main signal can be defined here:

- Unit (Nm or Ncm)
- Decimal places of the signal value
- Coefficient of the signal
    - The coefficient multiplies each current value by the factor of the coefficients listed
- Tara setting of the signal (zero point adjustment only *software* internal, not in the sensor)

2.2. **Plot**

The plot contains the following settings:

- Axis scaling
- Detail view in the plot (values of mouse tracking)
- Curve symbols
- Grid



Hydrotechnik UK Test Engineering Ltd, 1 Central Park, Lenton Lane, Nottingham, NG7 2NR, UK
+44 (0)115 9003 550 | sales@hydrotechnik.co.uk | www.hydrotechnik.co.uk