

Parameterization Software MESSKO[®] MSET

Operating instructions

4773303/07 EN



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We reserve the right to change the technical data, design and scope of supply.

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The original operating instructions were written in German.



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1 Introduction

This technical file contains detailed descriptions on how to safely and correctly install and operate the product and remedy simple faults yourself. This technical document is intended solely for specially trained and authorized personnel.

1.1 Manufacturer

Maschinenfabrik Reinhausen GmbH Falkensteinstrasse 8 93059 Regensburg Germany

Tel.: +49 941 4090-0 E-mail: sales@reinhausen.com Internet: www.reinhausen.com MR Reinhausen customer portal: https://portal.reinhausen.com

Further information on the product and copies of this technical file are available from this address if required.

1.2 Completeness

This technical file is incomplete without the following supporting documents:

 MSENSE® DGA 2/3 (BA 4001150) operating instructions or ECOSENSE® ACTIVE PART (BA 8969216) operating instructions

1.3 Safekeeping

Keep this technical file and all supporting documents ready at hand and accessible for future use at all times.

1.4 Notation conventions

This section contains an overview of the symbols and textual emphasis used.

1.4.1 Information system

Information is designed to simplify and improve understanding of particular procedures. In this technical file it is laid out as follows:



Important information.

5



1.4.2 Instruction system

This technical file contains single-step and multi-step instructions.

Single-step instructions

Instructions which consist of only a single process step are structured as follows:

Aim of action

- ✓ Requirements (optional).
- ► Step 1 of 1.
 - \Rightarrow Result of step (optional).
- \Rightarrow Result of action (optional).

Multi-step instructions

Instructions which consist of several process steps are structured as follows:

Aim of action

- ✓ Requirements (optional).
- 1. Step 1.
 - \Rightarrow Result of step (optional).
- 2. Step 2.
 - \Rightarrow Result of step (optional).
- \Rightarrow Result of action (optional).

1.4.3 Typographic conventions

The following typographic conventions are used in this technical file:

Purpose	Example
Operating controls, switches	ON/OFF
PC keyboard	[Ctrl] + [Alt]
Software operating controls	Press Continue button
Menu paths	Parameter > Control parameter
System messages, error messages, signals	Function monitoring alarm triggered
Cross reference	[► 41].
	Operating controls, switches PC keyboard Software operating controls Menu paths System messages, error messages, signals

Table 1: Typographic conventions



2 Safety

This technical document contains detailed descriptions on the safe and proper installation, connection, commissioning and monitoring of the product.

- Read this technical file through carefully to familiarize yourself with the product.
- This technical file is a part of the product.
- Read and observe the safety instructions provided in this chapter in particular.
- Observe the warnings in this technical file in order to avoid function-related dangers.
- The product is manufactured on the basis of state-of-the-art technology. Nevertheless, risks to life and limb for the user or impairment of the product and other material assets may arise in the event of improper use.

2.1 Appropriate use

The combination of device and software is designed solely for use in electrical energy systems and facilities. It is designed to detect, report and evaluate potentially harmful emerging trends in the monitored equipment (e.g. transformer) in good time by measuring the concentration of gases and moisture in the equipment's insulating oil.

The product is not designed and is not suitable for detecting rapidly developing faults and therefore is not intended to protect the equipment from such faults (e.g. through shutdown). For this, please use safety devices that have been designed for this purpose.

If used as intended and in compliance with the requirements and conditions specified in this technical document as well as the warning notices in this technical document and those displayed on the user interface, the product does not present any danger to persons, property or the environment. This applies throughout its entire service life, from delivery and installation to operation and even uninstallation.

Intended use refers to the following:

- Operate the software in accordance with this technical document, the agreed-upon delivery conditions and the technical data of the connected devices.
- Ensure that any necessary work is only performed by qualified personnel.
- Only use the data carrier included in delivery for the intended purpose and in accordance with the specifications of this technical document.

7



3 Product description

The MESSKO® MSET parameterization software is designed for the visualization, operation and configuration of the MSENSE® DGA 2/ MSENSE® DGA 3/ECOSENSE® ACTIVE PART as well as for processing measured data and event data. Furthermore, you can backup and export data with the program.

3.1 Function description

The range of functions of the MESSKO® MSET software depends on the connected device. Examples of available functions:

- Synchronization with the connected device
- Reading out the saved parameters and data
- Changing parameters
- Classifying and evaluating the data
- Data archiving
- Exporting the parameter configuration or device file with or without password
- Exporting the measured data and the event data in the .csv format
- Importing the parameter configuration or device file in the formats .mpfx, .mpf, .mdfx and .mdf
- · Printing out the parameters, measurements and events
- Deleting measured data and event data
- Checking and changing the password of the connected device
- Changing the name of the connected device

3.2 System requirements

To install and operate the program, the following system requirements must be satisfied:

- Operating system: Microsoft Windows 7 or later
- Screen resolution of at least 1024 x 768 pixels
- USB interface



3.3 Program interface

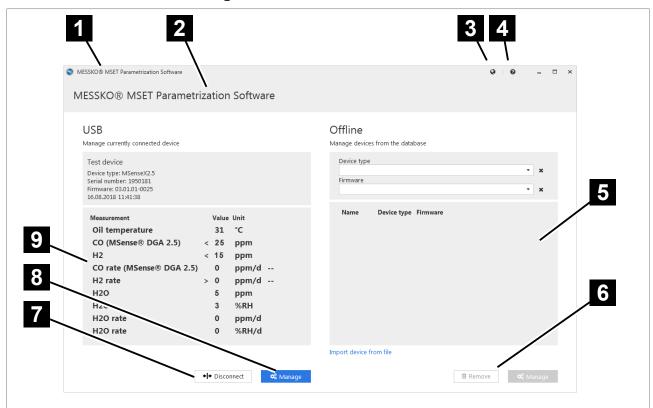


Figure 1: Main screen

1 Title bar	2 Header
3 Language selection	4 Documentation/about
5 Selection of device from the off- line database	6 Deletion of the selected device from the offline database or management of the device
7 Disconnection or connection of device and software	8 Managing the device connected via USB
9 Displaying device data and cur- rent measured values of the de- vice connected via USB	

1 Title bar

Program name "MESSKO® MSET parameterization software" and MR logo.

2 Header

Depending on the active window, the program name or the name of the connected device will be shown.

9



3 Language selection

For selecting the program interface language.

4 Documentation/about

Displays the operating instructions or publication information.

5 Selection of device from the offline database

A device can be selected from the internal database so that data can be deleted or managed.

6 Deletion of the selected device from the offline database or management of the device

Via the **Manage** button, the parameters of the selected device can be changed. As soon as the respective device is connected, the changed parameters can be synchronized with the device. The selected device can be deleted from the database via the **Delete** button.

7 Disconnection/connection

Via this button, you can disconnect the device from the MSET software when the device is online, or connect it when the device is offline.

8 Managing the device connected via USB

Via **Manage**, the parameters of the device connected via USB can be changed and subsequently synchronized. Measured data and the event data can be evaluated and output.

9 Displaying device data and current measured values of the device connected via USB

The device data and the current measured data of a device connected via USB is displayed here.



4 Operation

This chapter describes the functions and setting options for the software.

4.1 General information

The software can be used both in offline mode and in online mode. "Offline" means that a device is not connected. "Online" means that a device is connected via USB connection and is in communication with the MSET software. If there are any differences in operating the software depending on the mode, this is described in these operating instructions.

Access authorization

You can protect the parameter sets and data of your device with passwords.

There are various security levels available for this. The passwords can be issued and changed in online mode by the administrator, see section Checking/changing the password (Online only) [▶ Section 4.3.6, Page 20].

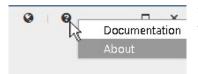
User level	Display text	Password
Service technician	Service technician	Passwort2
Administrator	Administrator	Passwort3

Language selection

The language for the MSET software can be set via this action button.

German, English and Chinese are currently available.

Documentation and software update



0

English

Deutsch

中文

The MSET documentation and the current version of the MSET software with publication information can be displayed via this action button.

4.2 Starting the MSET parameterization software

To start the MSET parameterization software, go to **Start > All programs > MSET parameterization software**. The MSET software starts.



If a device is connected, the software establishes a connection to this device. This is displayed via an animation icon on the left-hand side of the screen.

MESSKO® MSET Parametrization Software	∂ 0 – □ ×
MESSKO® MSET Parametrization Software	
USB Manage currently connected device	Offline Manage devices from the database Device type Firmware
	Name Device type Firmware Test device MSenseX2.5 03.01.01-0025
	Import device from file
o \$ Manage	🗎 Remove 🔍 🕫 Manage

Figure 2: Establishing a device connection

Once the connection is successfully established, the device data is displayed on the left-hand side of the screen under **USB**. This data includes:

- Device name
- Device type
- Serial number
- Firmware version
- Current date and time
- List of the current measured values



USB			Offline			
Manage currently connected device			Manage devices from the databa	se		
Test device			Device type			
Device type: MSenseX2.5					× x	
Serial number: 1950181 Firmware: 03.01.01-0025			Firmware		• x	
16.08.2018 11:41:38						
Measurement	Value Uni	t	Name Device type F	irmware		
Oil temperature	31 °C	;				
CO (MSense® DGA 2.5)	< 25 p	om				
H2	< 15 p	om				
CO rate (MSense® DGA 2.5) 0 p	om/d				
H2 rate	> 0 p	om/d				
H2O		om				
H2O		RH				
H2O rate		om/d				
H2O rate	0 %	RH/d				

Figure 3: Device connected

Clicking on **Manage** enables you to change the parameters of the connected device and to evaluate the measured data and events (see section Parameters [Section 4.3, Page 15]).

If a device is not connected, the following is displayed:

MESSKO® MSET Parametrization Software	0 0 <u> </u>
USB Manage currently connected device	Offline Manage devices from the database
	Device type
	Firmware 👻 🗙
	Name Device type Firmware Test device MSenseX2.5 03.01.01-0025
	Test device Misensex2.5 U3.01.01-0025
No device connected	
	Import device from file

Figure 4: No device connected

On the right side of the start screen, all devices that have already been stored in the offline device database are displayed in a selection list. Two filters for the device type and firmware version appearing above this selection list simplify the selection in the event that a large number of devices are stored in the database.



You can add a new device file to the database via the button **Import device** from file.

NOTICE! If a device file is already contained in the database, then all previous data for this device will be overwritten:

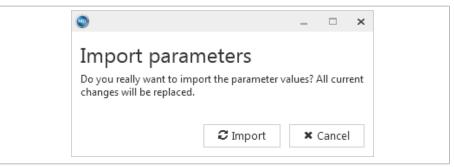


Figure 5: Importing parameters

You can delete devices from the database via the **Delete** button. When doing so, the following information appears:

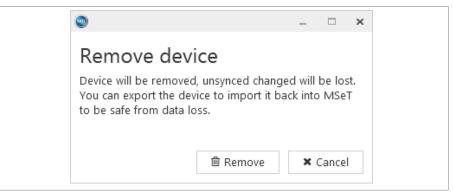


Figure 6: Delete device from the database

Via the **Manage** button, you can change the respective parameters and evaluate the measured data and events, see section Parameters [▶ Section 4.3, Page 15].



4.3 Parameters

Manage: Start screen for device connected via USB (Online mode)

MESSKO® MSET Parameterization S hware						0	- • ×
Home Test device I + Device type: MSENSE DGA 3 Serial num	iber: 1826063	Firmware: (13.01.01-0057 13:50:53	Parameters	Measurements	(D) Events	Service
CO Parameters	H2 F	arameter	s H2O Parameters	Settings	Modbus		
Warning limit for CO concentration	350	ppm	Current value				
Alarm limit for CO concentration Warning limit for rate of CO gas formation		ppm ppm/d	350				
Alarm limit for rate of CO gas formation	50	ppm/d	ppm 25				2000
Action for warning limit for CO concentration	lo assignment						
Action for alarm limit for CO concentration	lo assignment		Warning threshold for carbon monoxide or a parameterised relay contact. The messa The check is carried out at the parameteri	ge will also be logge	d in the event database		is given via
Action for warning limit for rate of CO gas formation N	lo assignment		Recommendation: 350 ppm (default settin	q, based on IEEE C5	.104, Condition 1).		
Action for alarm limit for rate of CO gas formation N	lo assignment						
CO value for 4 mA signal	25	ppm					
CO value for 20 mA signal	1000	ppm					
							\sim

Figure 7: Connected device online parameters

1 Action button: Pen for editing the	2 Green diamond: Device connected
device name	via USB
3 Basic device data and current date	

Manage: Start screen for device from the database (Offline mode)

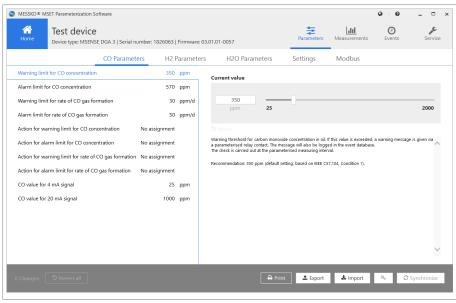


Figure 8: Managing a device from the database



4.3.1 Parameter selection

To edit the parameters, in the menu bar **1**, go to **Parameters**.

MESSKO® N	ISET Parameterization Software			\backslash	=		0	 ,c
Home	Device type: MSENSE DGA 3 Seria		Firmware: 0 Parameter	<u> </u>	Parameters	Measurements	Events	Service
Alarm limit f	it for CO concentration	570	ppm ppm	Current value			1	
Alarm limit 1 Action for w Action for al Action for al Action for al CO value for	It for rate of CO gas formation for rate of CO gas formation aming limit for CO concentration aming limit for CO concentration aming limit for rate of CO gas formation ram limit for rate of CO gas formation 4 mA signal	50 No assignment No assignment No assignment No assignment 25	ppm/d ppm/d ppm ppm	ppm 25	nessage will also be logged neterised measuring interval	in the event database		2000

Figure 9: Parameter selection

1 Menu bar	2 Parameter bar (parameter groups)
3 Parameter value table	4 Help
5 Parameter setting field	

You can select the following parameter groups via the parameter bar 2.

- CO parameters
- H2 parameters
- H2O parameters
- Settings
- Modbus

Once selected, the individual parameters and their set values are displayed in the parameter value table **3**.

Selecting an individual parameter will display the current value in the parameter setting field **5**, and this value can then be edited.

Help text **4** is displayed under this field which explains the parameter.

4.3.2 Editing parameters

The value table includes all parameters with parameter name, parameter value and the unit of measure. Furthermore, help text **7** for the selected parameter is displayed next to the table.



If parameter values are changed, these are identified on the left-hand side with a diamond **2**. Hovering the mouse over this diamond displays the corresponding values **1**:

- In Offline mode = Parameter default value (factory setting)
- In Online mode = Current parameter value in the device

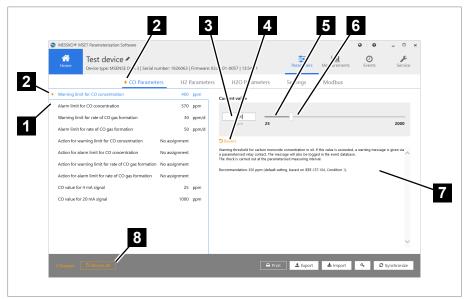


Figure 10: Editing values

1	Hovering the mouse over a dia- mond displays the changed pa- rameters	2 Diamond as an indicator for a changed parameter
3	B Entry field	4 Resetting the parameter
5	Parameter value range	6 Slide bar
7	' Help text	8 Reset all

Editing values

The value can be edited in the parameter setting field. This field includes:

- Entry field **3** for the current parameter value and unit of measurement
- Slider bar 6 for setting the parameter value
- Revert button 4
- Value range with minimum value and maximum value

The minimum and maximum values are checked during the entry.

The value can be edited in the entry field depending on its type (floating decimal, integer, Boolean, text).





If a value that is beyond the specified limits is entered, a warning is displayed and the value entered is ignored.

Clicking on the **Revert** button **4** resets the displayed parameter:

- In Offline mode to the default value (factory setting)
- In Online mode to the current parameter value in the device

In the parameter bar, a changed but not yet adopted value is indicated via a diamond **2** to the left of the parameter group name.

Clicking on the **Revert all 8** button will reset all changed parameters together.

4.3.3 Parameter report

If you would like to print the parameters out, proceed as follows:

► Click on the **Print** button.

 \Rightarrow A preview of the parameter values report is displayed on the screen.

MESSKO® MS	ET Paramet	trizatio	n Softwar	е	MR
Parameters					
Device type Firmware Serial number Name	MSenseX2.5 03.01.01-0025 1950181 Test device				
CO Parameters					
Name	Value	Minimum	Default	Maximum	Unit
Warning limit for CO concentration	350	15	350	2000	ppm
Alarm limit for CO concentration	570	15	570	2000	ppm
Action for warning limit for CO concentration	Relay 2		No assignment	-	
Action for alarm limit for CO concentration	No assignment	-	No assignment	-	

Figure 11: Report preview

The following actions can be performed via the buttons on the Parameter action bar:

- Print
- Open (files of the type *.fpx)
- Save as (files of the types *.fpx, *.xml, *.docx, *.pdf, additional formats)
- Send via e-mail

🔒 Print



L Export	port button t	hat follows.	/e a complete paramete	er file, select the Ex-
	An export wi	ndow opens.		
		9	_	□ ×
		Export		
		P		
		Parameter file	Device file	
		Export with passwo	ord?	
		Level	Service engineer	-
		Password		

Figure 12: Export window

4.3.4 Exporting parameter sets

If you only want to save the parameters, select the button **Parameter file** (format *.mpfx).

If, along with the parameters, you also want to save the measurement and event data in an archive file, select the button **Device file** (*.mdfx). A window opens for entering the file name and for selecting the file location.

By selecting **Export with password**, the password level can be selected and a password entered. This password will be entered in the export file and can be used once after importing. Therefore, entering the password when importing the data is not necessary.

4.3.5 Importing parameters

Clicking on the **Import** button opens up a file selection window. In this window, select a MDF, MDFX, MPFX or MPF file and import it by clicking on the button **Open**.

It is required that the device type and firmware version match.

Upon successful importing, the following message appears: *The parameter file will be validated by the program.*





Should the device associated with the file be known already, i.e. it has already been connected to the software or a different parameter set for this device has already been imported, the file will not be imported. A message will be displayed informing you of this.

🛍 Remove

If however, you would still like to import new parameters for this device, you must delete the current parameter file in your PC for this device by clicking on the **Delete** button. Once completed, the parameters can be imported via the usual method.

If you would like to import a parameter file while the software is connected with a device, you may only import files for other devices. To be able to view the newly imported parameters, break off the current connection and select the parameter file in the drop-down menu "Devices available in the database" as usual.

Importing a password-protected parameter file

A special case is importing a parameter file in which a password has been saved. When importing such a parameter file, you are automatically logged in and can transfer changed values to the device once.

The password, however, only remains valid until a parameter is changed, the device is disconnected or until data is transferred to the device.

4.3.6 Checking/changing the password (Online only)

In the Online mode, the administrator can check and change the passwords for all user levels. Upon delivery, the administrator password is "Passwort3".

Access rights to the device via the MSET software are managed via the user registration. The user names cannot be changed. The passwords can be freely set and should be changed to user-individual passwords. The passwords are case-sensitive.

The rights of the us	sers are specified in	the following table:
The fighte of the di	one and opeenied in	and ronoming table.

	Us	ser
Functions	Service techni- cian	Administrator
Changing passwords	0	х
Warnings	х	х
Alarms	Х	х
Alarm delay	х	х
Measurement interval	х	х
Analog outputs (420 mA)	х	х
Baud rate	х	х
Modbus address	Х	х
Field calibration and Default calibration	X	х



User					
Service techni- cian	Administrator				
Х	х				
Х	х				
0	х				
	Service technician				

Table 2: User rights (0 = read-access, X = read and write access)



To check the passwords, click on the $\ensuremath{\textbf{Password}}$ button. The password window appears.

1. Select a user and enter the password. Then click on **Check**.

0		_	×
Password			
Check password Cha	inge password		
Level	Service engineer		•
Password			
	✔ Check		

Figure 13: Checking a password

⇒ If the password is valid, you are granted the write-access rights associated with this user level, see above.



۲			_	×
Passw	ord	nge password		
Level		Service engineer		•
Password				
Change le New pass		Service engineer		•
Repeat ne	w password			
	C	Change password		

2. In the same way, to change a password select **Change password**.

Figure 14: Changing a password

- 3. Select the user level for which you want to change the password.
- 4. Enter the new password and repeat the entry.
 - ⇒ If both password entries match, the button turns blue and by clicking on the button, the new password is adopted by the system.

4.3.7 Synchronizing parameters (Online only)

C Synchronize

This button is only active if parameters have been changed and the system is in Online mode.

•						-	×
Synchron	ize						
Name Warning limit f	or CO concentration		alue New va				
Level Se Password	ervice engineer	•					
					Synchroniz	ze	1

Figure 15: Synchronizing parameters

The program requires the entry of the password level and the password. The password must be validated in the device.



At least the password level "Service technician" is required, see **Access rights** in General information [Section 4.1, Page 11]. Should the entered password be invalid, this is displayed with **Authentication failed**.

You will be logged out again in the following cases:

- If the device is disconnected
- Once data has been transmitted
- If a parameter has been changed

It is not possible to log out manually. If you do not register, you only have read access.



If parameters have been changed and transmitted or the MSET software has been closed, the device switches to the normal operating mode after 10 minutes.

4.3.8 Resetting parameters



With Revert all, you can reset all parameters as follows:

- In Offline mode, the parameters are reset to the last applicable values.
- In Online mode, the parameters are reset to the current parameter values in the device (values that were present upon connection).

The following pop-up opens before the values are reset.

٢		_		×
Revert parameter changes		paran	neter	
C Rever	t	X (Cance	I

Figure 16: Revert parameter changes



The identifier for values that have been changed but not yet transferred to the device is a diamond **1** to the left of the parameter value and a diamond **2** alongside the parameter group.

	CO Parameters	+ H2 Par	ameters	H2O Parameter
٠	Warning limit for CO concentration	400	ppm	Current value
	Alarm limit for CO concentration	570	ppm	
	Warning limit for rate of CO gas formation	30	ppm/d	400
	Alarm limit for rate of CO gas formation	50	ppm/d	ppm
	Action for warning limit for CO concentration	No assignment		D Revert
	Action for alarm limit for CO concentration	No assignment		Warning threshold for warning message is g
•	Action for warning limit for rate of CO gas formation	No assignment		logged in the event da The check is carried o
	Action for alarm limit for rate of CO gas formation	No assignment		Recommendation: 350
	CO value for 4 mA signal	25	ppm	
	CO value for 20 mA signal	1000	ppm	

1 Changed parameter	2 One or more values changed in the parameter group
3 Revert button	

As an alternative to resetting all values at the same time, you can also reset individual values when editing.



4.4 Measurements

To evaluate the measurements, in the menu bar **5** go to **Measurements**.

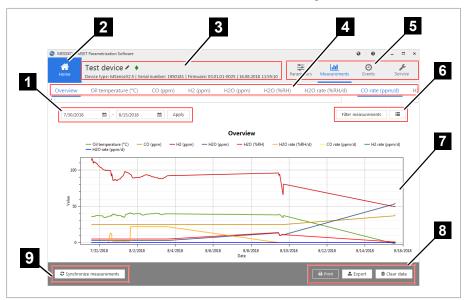


Figure 18: Measurements

1 Time period filter	2 Home button
3 Basic device data and date	4 Measured values
5 Menu bar	6 Display type selection
7 Graph or table	8 Print, export, clear data
9 Load data from device	

4.4.1 Displaying measured data

If you would like to set the measured data time period, proceed as follows:

- 1. Select the start date.
- 2. Select the end date.



3. Click on the **Apply** button to adopt the selected time period.

 \Rightarrow The measured data is displayed in a graph.

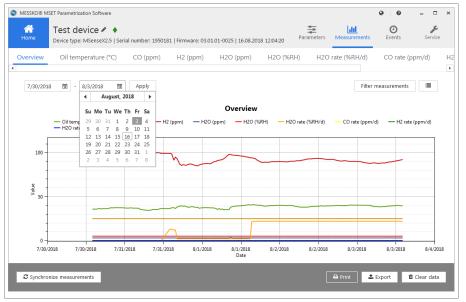


Figure 19: Measured data time period

Filter measurements

- 4. If you only want to display selected measured data, limit the display via the **Filter measurements** button.
- 5. If you would like to display the measured data in a table, select the **List** button to the right.

Test dev Device type: N		al number: 1950181 Firmwar	e: 03.01.01-0025	16.08.2018 11:5	7:42 Paramete	ers Measurements	O Events Service
erview Oil temp	erature (°C)	CO (ppm) H2 (pp	om) H2O	ppm) H2	O (%RH) H	I2O rate (%RH/d)	CO rate (ppm/d)
7/30/2018 開	- 8/15/2018	19 Apply					[.dtd
Time	Oil temperature	e (°C) (Deg) CO (ppm) (ppm	ı) H2 (ppm) (pp	m) H2O (ppm)	(%RH) H2O (%RH) (%RH/d) H2O rate ((%RH/d) (ppm/d) CO r 🔺
7/30/2018 1:56:41 PM	35.5957	25	113.2985	3	5	0	0
7/30/2018 2:40:59 PM	35.8925	25	116.344	3	5	0	0
7/30/2018 3:14:33 PM	35.744	25	114.7562	3	5	0	0
7/30/2018 3:59:53 PM	36.4861	25	112.0943	3	5	0	0
7/30/2018 4:39:52 PM	36.0409	25	109.28	3	5	0	0
7/30/2018 5:14:53 PM	36.3377	25	111.7431	3	5	0	0
7/30/2018 5:49:57 PM	36.3394	25	111.1275	3	5	0	0
7/30/2018 6:25:04 PM	36.3377	25	110.8642	3	5	0	0
7/30/2018 7:00:01 PM	36.6346	25	110.1688	3	5	0	0
7/30/2018 7:34:45 PM	37.3779	25	110.4106	3	5	0	0
7/30/2018 8:09:31 PM	37.2283	25	109.1639	3	5	0	0
7/30/2018 8:44:16 PM	37.3767	25	109.2532	3	5	0	0
7/30/2018 9:19:12 PM	37.3767	25	108.7325	3	5	0	0
7/30/2018 9:54:13 PM	37.3767	25	107.628	3	5	0	0
7/30/2018 10:29:16 PM	37.3767	25	106.5961	3	5	0	0
7/30/2018 11:04:20 PM	37.3767	25	105.7437	3	5	0	0
7/30/2018 11:39:25 PM	37.2283	25	105.1806	з	5	0	0 👻
4							•

 \Rightarrow The measured data is displayed in a table.

Figure 20: Measured data table



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6. If you would like to display the measured data in a graph again, then switch back via the **Graph display** button:

4.4.2 Printing/opening/saving/mailing measured data

If you would like to print the measured data out, proceed as follows:

- Select the Print button, and select whether you want to print just the graphs, just the tables, or both:
 - \Rightarrow A preview of the measured values report is displayed on the screen.

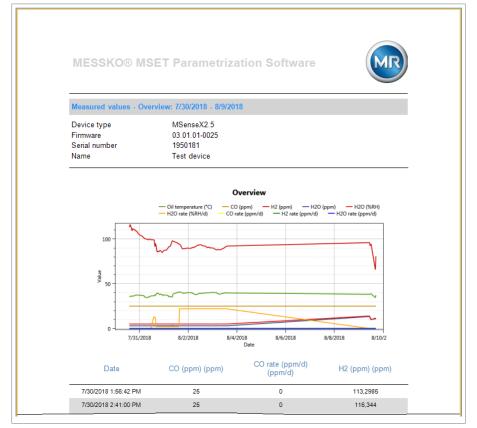


Figure 21: Measured data preview

The following actions can be performed via the buttons on the action bar:

- Print
- Open (files of the type *.fpx)
- Save (as files of the types *.fpx, *.xml, *.docx, *.pdf, additional formats)
- Send via e-mail

		_
	Print	



4.4.3 Exporting measured data

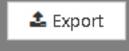
If you would like to export and save the measured data, proceed as follows:

- 1. Click on the **Export** button.
 - \Rightarrow A data selection window for exporting opens.
- 2. Select a name and specify the file location.
- 3. Click on Save.
 - \Rightarrow The file is saved in the .csv format.

4.4.4 Synchronizing measurements (device connected via USB)

Synchronize

To transmit the measured data from the device to the MSET software, click on the **Synchronize** button.





4.5 Events

To evaluate the events, go to **Events** in the menu bar **3**.

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6 Event table

5 Load event data from the device

7 Time period



4.5.1 Displaying event data

Select the time period for which the events are to be displayed.

MESSKO® MS	ET Parameterization Soft	ware				0	_ □ :
☆ Home	Test device & Device type: MSENSE I		ber: 1826063 Firmware: 03	01.01-0057 13:59:12		urements Events	Service
1/31/2017	5/25/2020	1 Apply					
4	May 2020	•					
Tim		·					-
1/3 Mo	Tu We Th Fr Sa S	U OFF					
	28 29 30 1 2 3						
1/3 4	5 6 7 8 9 1						
	12 13 14 15 16 1	7 Change					
1/3 18	19 20 21 22 23 2	4 -					
1/2 23	26 27 28 29 30 3						
	2 3 4 5 6						
		-					
	-	WER_ON WER_OFF					
	7 10:00:16 PM EV_PO						
		WER_OFF					
		WER_ON					
		WER_OFF					
		WER_ON					
		WER_OFF					
		WER_ON					
	-	WER_OFF					
	7 10:19:37 PM EV_PO	-					
	0 10:57:03 AM EV_PO	-					
	0 10:57:08 AM EV_PO						
5/19/202	0 3:16:45 PM EV_PO	WER_OFF					•
· · ·	ize events				🖨 Pi	int 🏦 Export	🏛 Clear data

Figure 23: Event time period

The events will be displayed in a list with information on the time of occurrence and the error cause. C Synchronize events



4.5.2 Synchronizing events (device connected via USB)

To download the current event data from the device, click on the **Synchro**nize events button.

The event data will be downloaded. This process will be illustrated via the following animation and can take a few minutes.

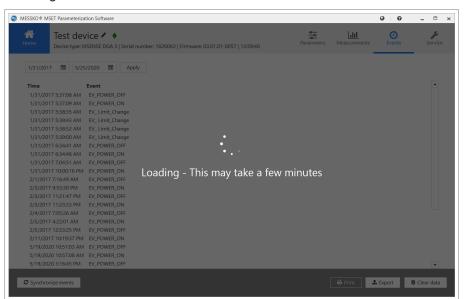


Figure 24: Loading event data

4.5.3 Printing/opening/saving/mailing event data

If you would like to print the event data out, proceed as follows:

- ► Click on the **Print** button.
 - \Rightarrow A preview of the event data report is displayed on the screen.





MESSKO® MS	SET Parametri	zation Software	MR
Events - Time period:	1/1/1970 - 8/14/2018		
Device type Firmware Serial number Name	MSenseX2.5 03.01.01-0025 1950181 Test device		
Date		Event	
1/1/1970 12:00:00 AM		Power off	
7/30/2018 11:22:54 AM		EV_Limit_Change	
7/30/2018 11:22:57 AM		EV_Limit_Change	
7/30/2018 11:23:00 AM		EV_Limit_Change	
7/30/2018 11:23:03 AM		EV_Limit_Change	
7/31/2018 11:43:08 AM		EV_H2O_REL_Rate_Warn_ON	
7/31/2018 12:46:37 PM		EV_H2O_REL_Rate_Warn_ON	
7/31/2018 12:46:38 PM		EV_H2O_REL_Rate_Alarm_ON	

Figure 25: Printing events

The following actions can be performed via the buttons on the action bar:

- Print
- Open (files of the type *.fpx)
- Save (as files of the types *.fpx, *.xml, *.docx, *.pdf, additional formats)
- Send via e-mail

4.5.4 Exporting event data

If you would like to export and save the event data, proceed as follows:

- 1. Click on the **Export** button.
 - \Rightarrow A data selection window for exporting opens.
- 2. Select a name and specify the file location.
- 3. Click on Save.

 \Rightarrow The file is saved in the .csv format.

🌲 Export





Clear data

4.6 Deleting all data (device connected via USB)

It is only possible to delete the entire device database from the device. This will delete all measured data and event data on the device. The parameter data remains unaffected. You need the administrator password level to do this.

If you would like to completely delete the measured data and event data on the device, proceed as follows:

1. Click on the **Delete data** button.

 \Rightarrow The window for deleting the measured data and event data opens.

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Clear device	data	
· · ·	delete all measurement and e This cannot be undone.	event
Password		
Level	Administrator	
	🖻 Delete 🛛 🗙 Cano	el

Figure 26: Deleting events

- 2. Enter the administrator password.
- 3. Click on the **Delete** button.
 - A pop-up window appears asking for confirmation of the delete procedure.
- 4. Click on **Yes** to confirm the delete procedure, or on **No** to cancel the procedure.

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- 12/22 - Maschinenfabrik Reinhausen GmbH 2022

