Operating Instructions Dräger FG4500

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Inhalt

1. Information

1.1 Certification

The FG4500 flue gas measurement device is tested according to the requirements of the European standard EN 50379 Parts 1 and 3.

1.2 Usage

The FG4500 flue gas measurement device is suitable for measuring combustion parameters of heating systems. It is not suitable for use as a continuously operating gas warning and alarm device.

Any use of this device requires full understanding and compliance with these operating instructions, the relevant standards, as well as the relevant statutory regulations.

The device is intended only for the uses described in this manual. Any improper use of the device may lead to electric shock or destruction of the measuring device!

Always fully charge the FG4500 via the USB interface with USB power supply adapter only.
Incomplete charging affects the charging capacity of the battery in the long term.
When charging, no measurements should be performed.

The displays shown in this manual are examples.
Only recorded measurements can be printed or saved.

The device employs fuel-specific formulas to calculate CO2 and qA (flue gas loss) combustion parameters. For this reason, these combustion parameters can only be calculated for the fuels which are saved in the fuel table of the device. The following fuels can be set: Light fuel oil, natural gas, LPG propane, heavy fuel oil, pellets, wood, brown coal, hard coal, coal briquettes, coal coke, anthracite, biogas, LPG butane, coal gas, coke oven gas.

The lifetime of the sensors used in the FG4500 is typically 3 years for both the O2 sensor and the CO sensor. The pressure sensor has no limited lifetime under normal-use conditions.

To avoid influencing the measuring accuracy of the sensors, the FG4500 must not be exposed to solvents, fuels or plasticizers during operation and storage.

1.3 Maintenance

To ensure proper function and accuracy, calibration and adjustment should be performed once a year. Device maintenance must only be carried out by trained service personal.

1.4 Disposal according to WEEE

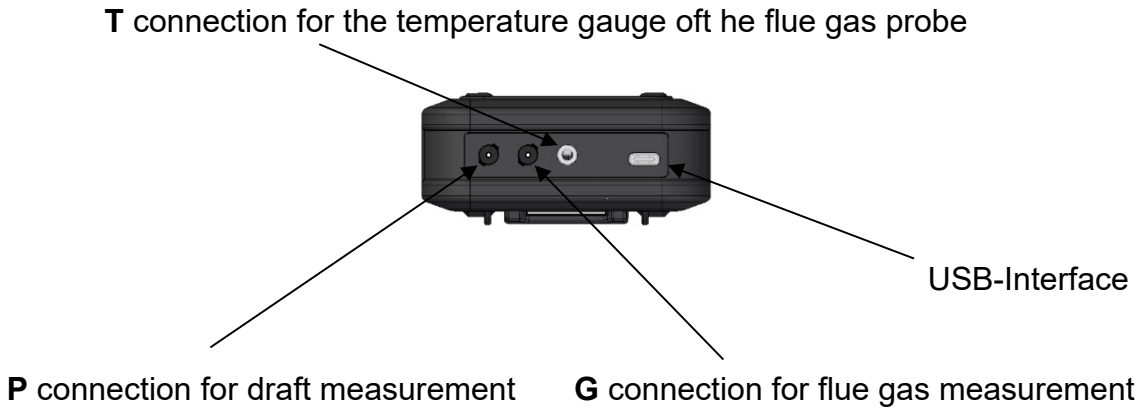
Since 2005, EU-wide regulations apply to the disposal of electrical and electronic devices. In essence, these regulations set out that collection and recycling options should be available for households. Because the FG4500 is not registered for use in private house-holds, it must not be disposed of through such channels. The devices can be returned to your national retailer or to your national Dräger Safety Organization for disposal. Please contact Dräger MSI GmbH, if you have any questions regarding disposal.

2. The measuring device

The FG4500 is an all-purpose, electronic multi-channel device for calibration and testing work on small and medium-sized combustion systems.

All tests and measurements can be documented through print outs or storage.

Connections



3. First time use and general operation

3.1 Preparation for first time use

Before using the measuring device, the integrity of all components must be checked, e.g.:

- Device exhibits no visible damage
- No condensed water in the gas preconditioner
- The gas preconditioner filter is clean
- Gas hoses without defects
- Visual inspection of the probe

Connect the quick-release hose coupling of the flue gas probe into the gas inlet G of the measuring device and the jack plug of the flue gas probe in the temperature input T of the measuring device. Ensure before each measurement that a clean filter is inserted in the gas preconditioner!

Only turn the FG4500 on, if the flue gas probe is located in fresh air. The null signals of the sensors are matched with the fresh air.

3.1.1 Before each measurement

The air-tightness of the gas path can be tested easily: Close the gas inlet of the probe with the round cap. If the gas path is not leaking, the pump should now deliver more power. The sound of the pump changes accordingly. If no change occurs, then the gas path must be checked with a gas flow meter.

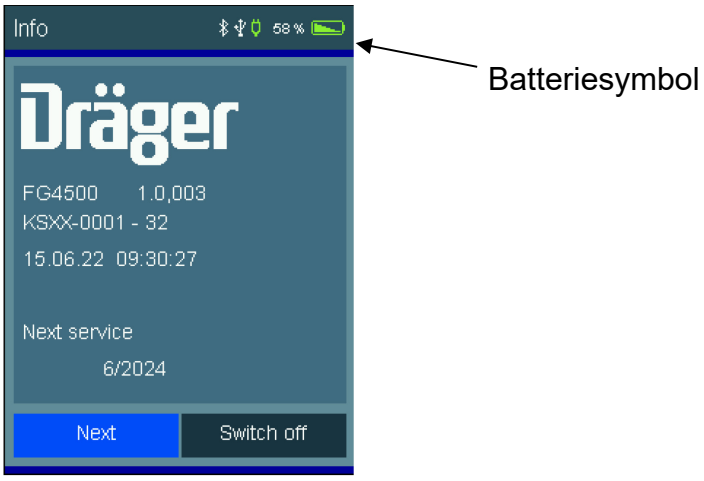
3.1.2 Touchscreen

The FG4500 is operated with a touch-sensitive display (capacitive touch screen). You can perform the tap and swipe functions on the screen with your finger or other leading input devices. Ballpoint pens, pencils and the like are not suitable.
Since the display is equipped with a capacitive touch screen, the operation works with light touches - without special finger pressure.
Menus and lists can be moved up and down by pan/down (swipe) gestures.
Menus and list positions are highlighted by tapping. The selected position is activated via the **Selection** button or by tapping it again.

Touching the display with sharp or pointed objects can lead to the destruction of the display.

3.2 On/Off

Power on: Press the power button for about 1 second until the device turns on.
Note: The first time you turn it on, the power button must be held for about 13 seconds until the device turns on.



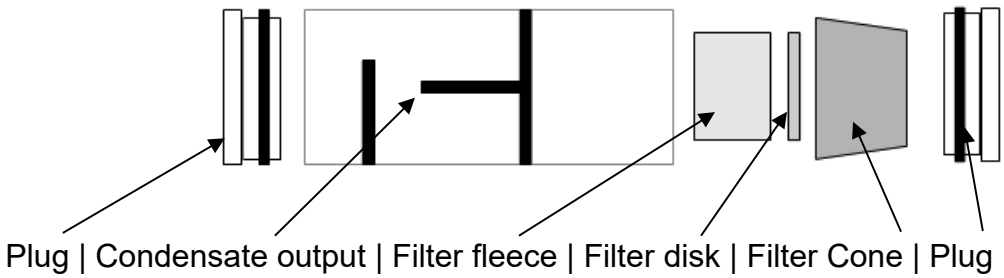
The home screen shows the device type, software version, date and time, and device number. The battery icon shows the state of charge of the battery.
After 5 seconds, the "Next" button appears. This will switch to the main menu. If the button is not pressed within 30 seconds of switching on, the device switches off automatically. The FG4500 then checks its functions by means of a system check. If regular maintenance is to be carried out, the device reminds of the maintenance date from one month before the due date.
The FG4500 takes about 30 seconds from power on until full operational readiness is given.

Switch off: Select and trigger the menu item "Off" in the main menu orpress the power button in the main menu c a. 1 second until the device switches off.

3.2.1 After each measurement

After the measurement, remove the probe from the exhaust gas stream and let it suck in fresh air for 1-2 minutes, only now turn off the device. Empty and clean the gas treatment cartridge. To open the gas treatment cartridge, remove the two closure plugs by hand. The filter discs and the filter fleece must be checked for contamination and, if necessary, replaced.

Gas preconditioner:

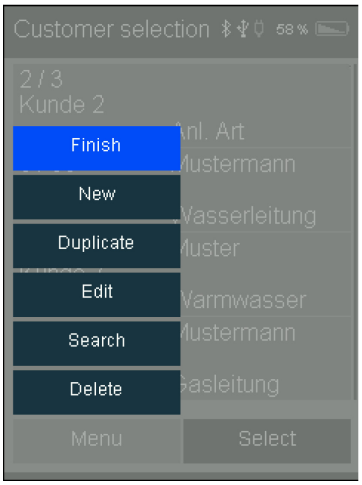


3.3 Control panels

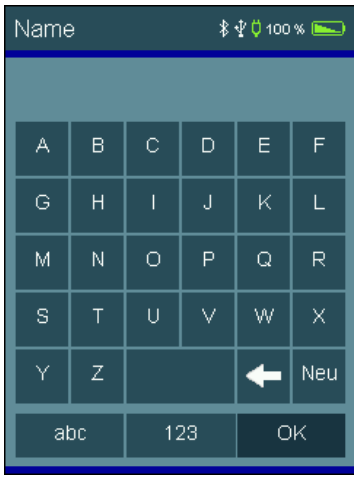
Menu	= opens the context menu for the selection and editing of system data
Select	= enables the marked position
OK	= confirms a selection
Finish	= leads to the next step of a function after an action
Next	= leads to the next step of a function
Cancel	= terminates a function, switches to the main menu
➡	= scrolls forward, display switches to diagram
⬅	= scrolls backwards, display switches to statistics data
Null	= readjusts the zero point of the pressure sensor
Start	= starts the measurement
Stop	= stops the measurement
New	= prepares a new measurement
Docu	= switches to the documentation menu
Back	= switches from the documentation menu to the result display
Customer	= switches from the documentation menu to the system selection
Print	= prints the measurement result via Bluetooth
Save	= saves the measurement result to the data memory
End	= switches from the documentation menu to the main menu
End	= ends a measurement time prematurely
Input	= opens the input option for printer texts

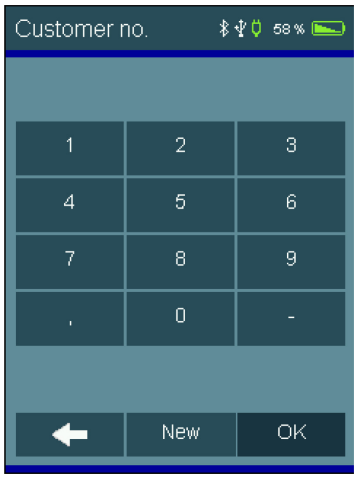
3.4 Customer and site management

The Menu button opens a shortcut menu. Used together with the menu item, the context menu provides different processing options and commands.



Customer data and comments can be entered via an on-screen keyboard.



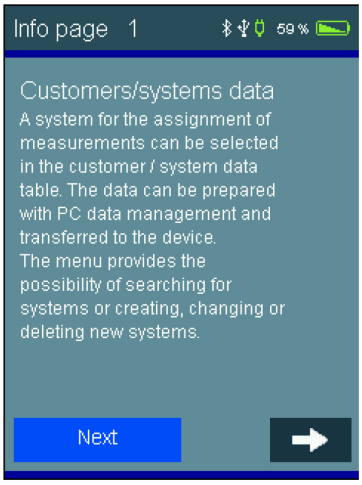


3.5 Integrated operating instruction

In the Settings menu item, integrated operating instructions can be activated. When op-erating instructions are switched on, the corresponding instructions are shown when starting a function.

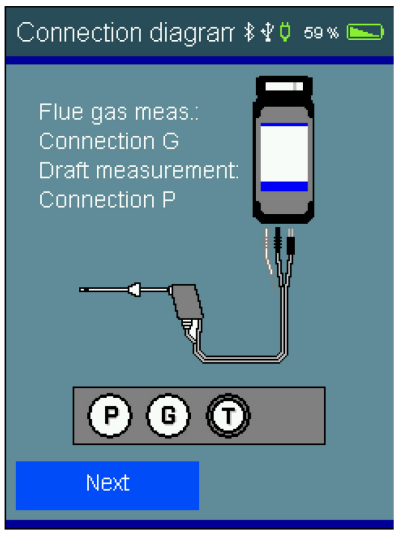
Scroll between pages with ➡ and ⬅ .

Über die Schaltfläche Weiter wird das Messprogramm gestartet.

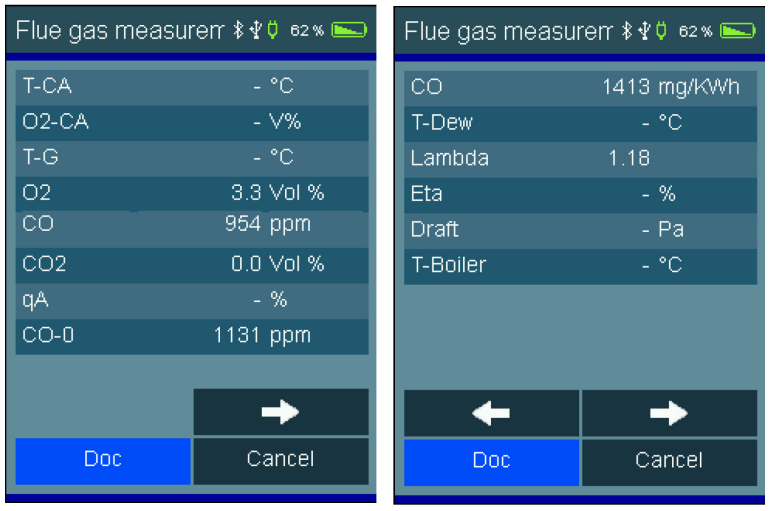


3.6 Starting measurements

Before starting a measurement, the connection used for the measurement is indicated.



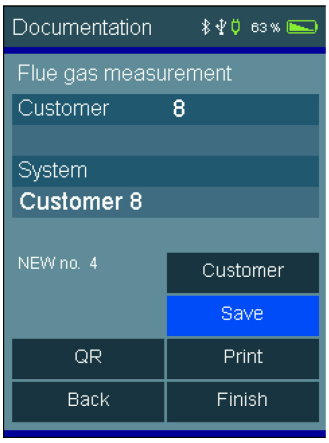
3.7 Display results



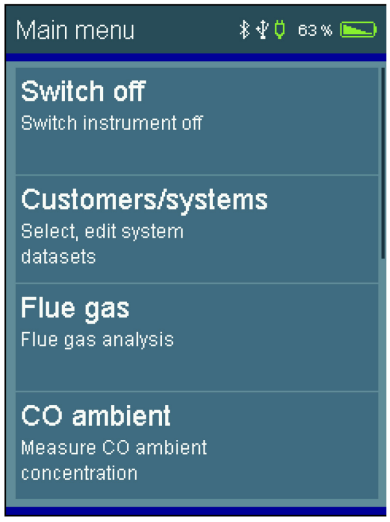
A result display appears after completing a measurement.

3.8 Documentation menu

After completion of the measurement, the documentation menu can be called.
If no customer was selected before the measurement, a customer can be selected or newly created here.
With **Save** , the measurement result is assigned to the customer.
If no customer has been selected, the measurement result is only saved with date and time.
With **printing,** the measurement result can be printed out via a connected BTLE printer. *See 12.15 Printers.*



4. Main menu



Selectable menu items are:

OFF:	Ausschalten des Messgerätes
Customers / sites:	Select and edit customer / site records
Flue gas measurement:	Flue gas analyses with selectable parameters
CO-ambient:	Measurement of the CO ambient concentration
Pressure:	Basic pressure measurement
Checklists:	Select, edit and save checklists
Data memory:	Data memory information, stored measurements, and inspector table
Info:	Device information
Settings:	Change device and measurement settings, set clock

5. Selecting and entering customer data

Customer and site records can be created and edited. Completed measurements can then be saved under the set-up customers and sites. Via a link in the documentation menu, customers and sites can be created after the measurement.
In addition, it is also possible to create customer and site records with the software and to transfer data to the device.

Select:	The displayed customer number is transferred.
Menu:	The context menu is opened.
End:	Measurements are saved without site link.
New:	Neue Kundendaten können angelegt werden.
Duplicate:	Duplicates record.
Edit:	You can edit existing records.
Search:	You can search for a string.

Delete : You can delete the selected record. That is only possible, if no measurement data is saved in the device.

The following can be stored: customer number, name, system type, system place, site number, street, post code, city, customer name, customer street, customer post code, customer city, customer phone number, boiler manufacturer, boiler type and year of manufacture, boiler output, burner manufacturer, burner type and year of manufacture, burner design and fuel.

The acquired customer number applies to all subsequent measurements until it is switched off or another number is selected.

6. Flue gas measurement

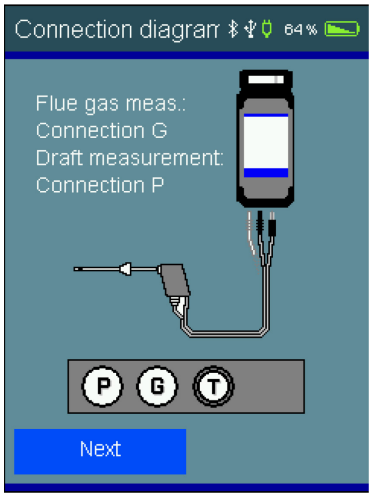
To perform a complete flue gas measurement, we recommend a measurement time of at least 2 minutes.

The gas outlet at the side of the device must be free and must not closed or clogged!

6.1 Connecting the flue gas probe

Turn the FG4500 on and press **Next**.
After the system check, the FG4500 is ready for use. Select **Flue gas measurement** in the main menu.

Connect the flue gas probe to the device (see connection diagram). Plug the jack plug of the flue gas probe in the temperature input **T** and the quick-release coupling of the flue gas probe hose into the gas input **G** of the measuring device. Then press **Next**.

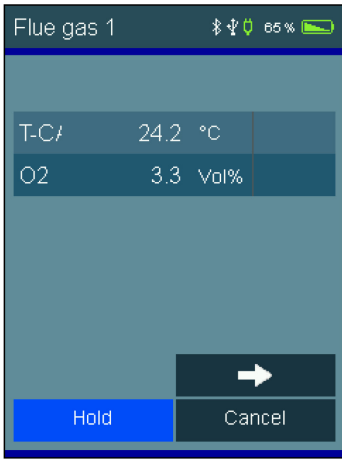


6.2 Selecting fuels

Select the desired fuel and accept.

If the pump was shut off before selection of flue gas measurement function, a short stabilization phase will be performed.

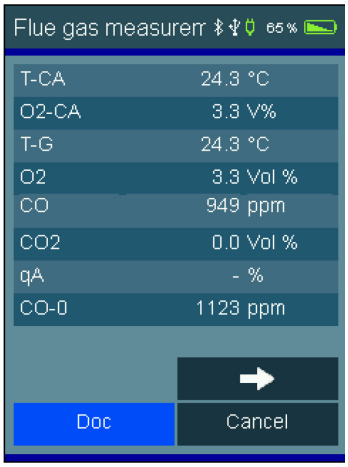
6.3 Measuring combustion air temperature



The FG4500 will now ask you to measure the combustion air temperature. Place the flue gas probe in the inspection opening of the combustion air intake or alternatively hold the flue gas probe in the room air.

As soon as the combustion air values have stabilized, press **Hold**. If an oxygen content of less than 21% is measured in the combustion air supply, this implies under circumstances a leak in the exhaust pipe in the air-exhaust system.

6.4 Flue gas measurement



Within the exhaust stream, there are areas which only partially mixed with exhaust. For this reason, it is necessary to take the sample from the flow centre. The flow centre is characterized by maximum flue gas temperature and minimum oxygen concentration.

Press the arrow button ➡ , once the combustion air measurement is complete.

Now insert the flue gas probe into the exhaust pipe, move it in the exhaust stream and position it so that the tip of the sensor is the flow centre (maximum gas temperature, minimum oxygen concentration). After you've found the flow centre and the measurement values have stabilized, fix the flue gas probe in this optimal position with the sensor cone. A summary of currently measured combustion values is then displayed. Then press the **Hold** button and then the arrow button ➡ . By pressing the arrow button ➡ again, you can display the other measurement results.

6.5 Average value measurement

The German regulation 1st BImSchV calls for simultaneous determination of oxygen content and temperature of flue gas as an average over a time period of 30 seconds. If **average** measurement is enabled in the settings, you can begin the 30-second averaging process by pressing **Start**, no need to press **Hold**.

6.6 Draft measurement

If **draft measurement** is enabled in the settings, the draft (differential pressure) of the flue gas can be measured. This requires moving the flue gas probe from gas inlet **G** to pressure connection **P**.

6.7 Entering combustion system data

If the input of combustion system date has been enabled in the device settings, the boiler temperature, the smoke numbers and the appearance of oil derivatives can be entered. It is only necessary to enter smoke numbers and oil derivatives in case of combustion with fuel oils (light fuel oil and heavy fuel oil) and are only available for measurements with these fuels. Once the input data is complete, press the arrow button ➡.

The result summary is then displayed and can be scrolled through using the arrow buttons ⬅ ➡.

6.8 List of display values

T-A	Combustion air temperature
T-G	Flue gas temperature
O_2	Measured oxygen
CO	Measured carbon monoxide
CO_2	Measured carbon dioxide
qA	Determined flue gas loss of flue gas
CO-0	Determined carbon monoxide content relative to 0 vol. % oxygen
Eta	Determined combustion-technical combustion efficiency
T-Dew	Determined temperature of the dew point
Lambda	Determined combustion air ratio
Draft	Measured induced draft
T-boiler	Entered boiler temperature
O_2-A	Measured oxygen content of combustion air
Smoke no.	Average of the entered smoke numbers
Oil deriv.	Consideration of oil derivatives

7. Ambient air CO measurement

In einigen Ländern besteht die Vorschrift, am Aufstellort einer Verbrennungsanlage deren Dichtheit mittels einer Messung der CO-Konzentration der Raumluft zu bestimmen. Hierzu benötigt das FG4500 keinen externen CO-Sensor. An einem Ort mit frischer Luft ohne CO-Gehalt muss der Anzeigewert 0 ppm sein. Ist der Anzeigewert nicht 0 ppm, den Schlauch der Abgassonde vom Gerät abziehen, eine kurze Zeit mit laufender Pumpe warten und **Null** drücken. Die Abfrage mit **Ja** bestätigen und der angezeigte Wert wird zu Null gesetzt. Der so eingestellte CO-Raumluft-Nullpunkt ist unabhängig vom CO-Nullpunkt einer normalen Abgasmessung. Anschließend den Schlauch der Abgassonde wieder an das Gerät anschließen. Nach dem Drücken von **Halten** und der Pfeiltaste **>>** kann das Dokumentationsmenü aufgerufen werden.

8. Pressure measurements

8.1 Connection diagram

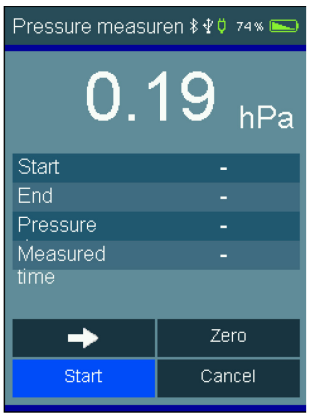
Für Druckmessungen bis max. 160 hPa (mbar) (Gas-, Düsen- oder Fließ- druck) die Messstelle mittels des Brennerdruckschlauchs mit dem Druckeingang **P** des Messgerätes verbinden.

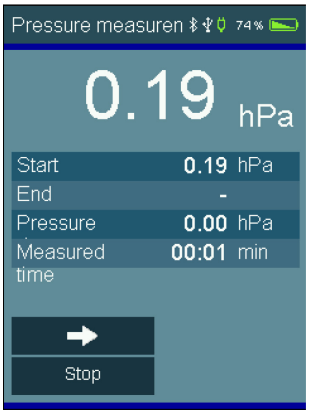
8.2 Pressure measurement

Selectable functions are:

Zero:	the displayed value is set to zero
⬅ ➡	Switching between statistics and chart
Start:	Start the pressure measurement
Cancel:	Cancellation of the pressure measurement

To begin press the **Start** button, according to desired duration with **Stop** to stop the measurement.
After starting the pressure measurement, the current pressure, the starting pressure, the difference between the starting pressure and the previous measurement duration are displayed. The final pressure is displayed, if the measurement is suspended. During the measurement, you can switch to the graph view with the arrow button ➡ .





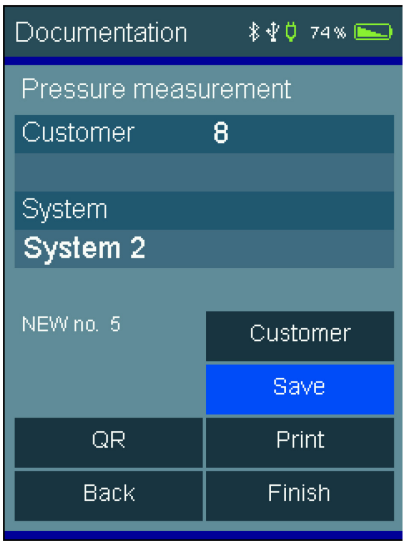
9. Checklists

Measurement specifications often include visual inspections and other controls that have nothing to do with the actual measurement. Such additional information regarding the measurements or the equipment can be recorded with checklists. Even work instructions can be created and processed in this manner.
Up to 4 checklists with maximum 20 entries can be created using the PC data management. Each entry can be created so that it can be answered with Yes / No, or with a max. 5 characters long input. If no input has been provided, the entry is represented with ---.

10. Data memory

10.1 Saving memory

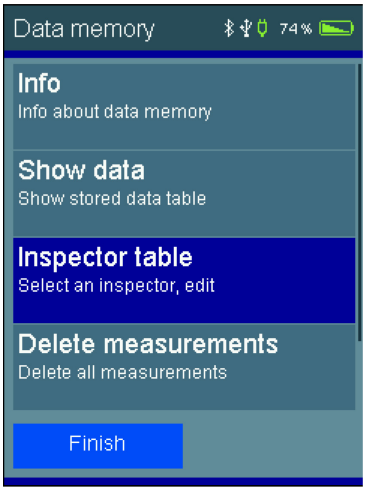
If no site number was selected prior to measurement, the measurement of a site can be assigned before saving, by pressing **Customer** under the documentation menu.
Without site assignment, the measurement is saved with date and time.
By assigning a site, the site number is displayed in addition.

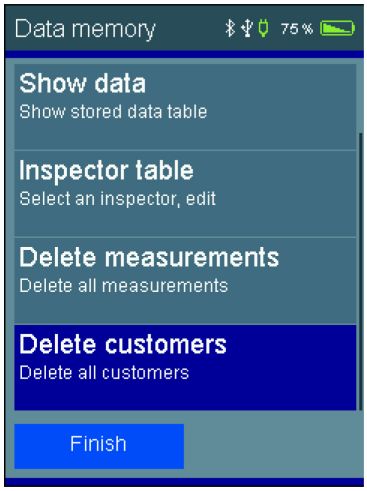


10.2 Data memory functions

Selectable functions are:

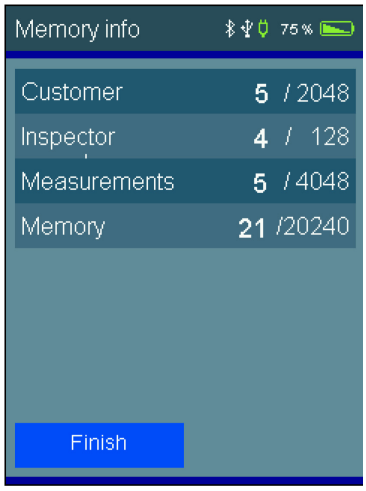
Info:	Data storage information
Show data:	Show stored record
Inspectors table:	Viewing and editing the Inspectors table
Delete measurements:	Delete measurement data storage
Delete all customers:	Delete all customer data





10.3 Data storage information

The number of stored customers and measurements, and the total number of occupied memory locations, are displayed in the data storage information.

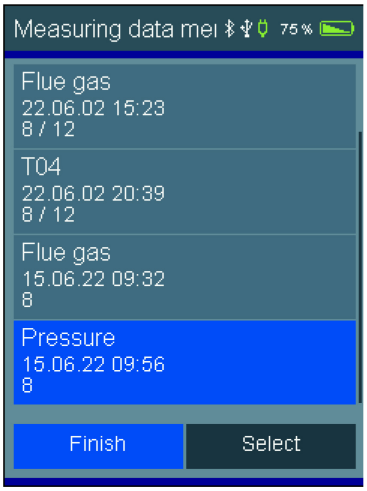


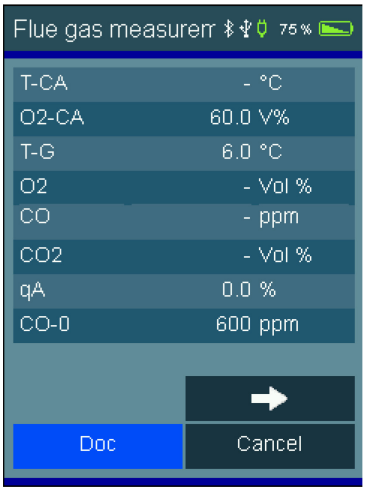
10.4 Daten zeigen

The measurement is saved with date and time and site number, if a site has been assigned.

Select calls up the measurement results display.

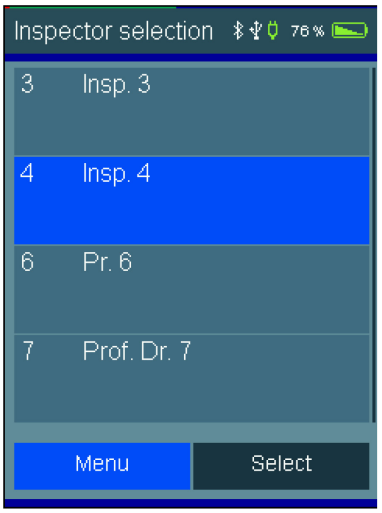
With **Docu** the assigned site is displayed and the measurement result can be printed out with site and inspector





10.5 Inspector table

In the inspectors table different inspectors can be entered with number, name, street, postcode, town and phone number information. The selected inspector is associated with the stored measurement data. An inspector can only be deleted, if no measurement data is saved in the device.

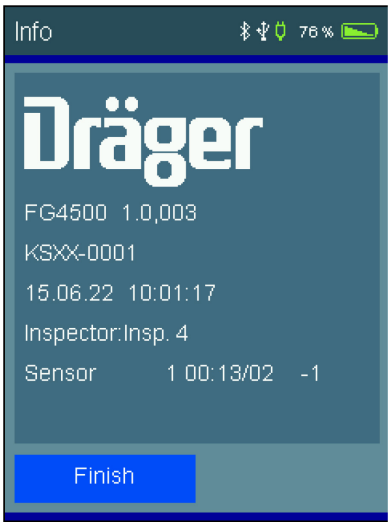


10.6 Deleting measuring data

Deleting measuring data: All measured data are deleted.

11. Device information

This function provides information about the manufacturer (Dräger), the measuring device type (FG4500), the version of the device software (here 1.1,003), the device serial number, the set date, the set time, the selected inspector and the next service date.



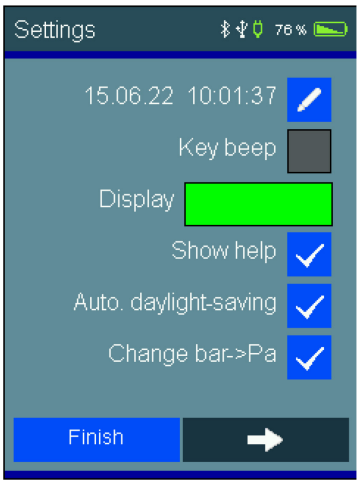
12. Settings

The measuring device can be configured according to user's requirements.

The functions are switched on and off via the control panel or switched to the input.

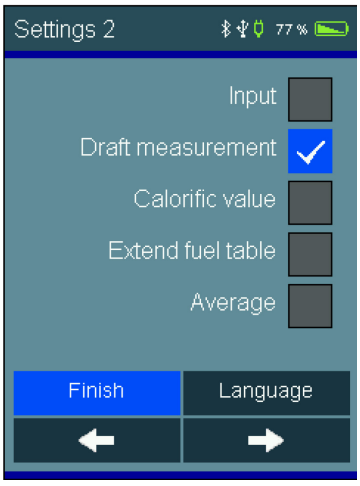
Settings Page 1:

Date and time:	Date and time can be set.
Key beep:	The key tone can be switched on or off.
Display:	The display illumination can be adjusted.
Show help:	Built-in help texts can be activated or can be deactivated.
Auto. dayl.-saving:	Automatic conversion of daylight saving time can be switched on or off.
Wechsel bar -> Pa:	Pressure unit can be changed
Mit der Pfeiltaste ➡ gewechselt.	wird zur zweiten Seite der Einstellungen



Settings Page 2:

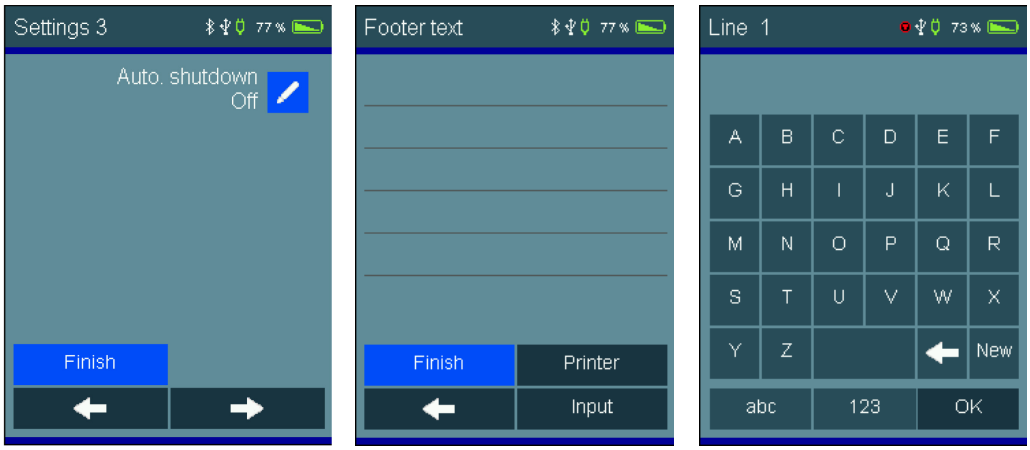
Input:	Input of combustion system data during exhaust gas measurement, on or off can be switched.
Draft measure.:	The train measurement during the exhaust gas measurement can be switched on or off.
Calorific value:	Consideration of condensing boiler systems or turn off.
Extend fuel table:	Display of the extended fuel table.
Average measure.:	SwitchAverage measurement on or off.
Language:	Setting the system language



Settings page 3:

Auto. shutdown Off: Setting the time for automatic shutdown.

Pressing the arrow button ➡ again switches to entering a footer text for the Bluetooth printer. A default printer can also be set there.



12.1 Date and time

Setting and changing the date and time.
Enter the desired date and time with the numeric keypad. Use the arrow buttons ⬅ ➡ to change the position to be changed. Confirm entries with **OK** .

12.2 key beep

Mit dieser Funktion lässt sich der Tastenton ein- und ausschalten.

12.3 Display backlight

Mit dieser Funktion kann die Displayhelligkeit stufenlos eingestellt werden. Die Displayhelligkeit beeinflusst die Batterielaufzeit.

12.4 Show integrated operation instruction

Mit dieser Funktion kann die integrierte Bedienungsanleitung ein- und ausgeschaltet werden.

12.4 Automatic daylight saving

Mit dieser Funktion kann die automatische Berücksichtigung zwischen Sommer- und Winterzeit ein- und ausgeschaltet werden.

12.5 Change bar -> Pa

This function can be used to switch between the printing units.
become. Changing the pressure unit is applied to all measurements.

12.6 Input of combustion system data

Input of combustion system data during exhaust gas measurement can be switched on or off. These include boiler temperature, soot numbers and the consideration of oil derivatives.

12.7 Draft measurement

Soll die Zugmessung bei der Abgasanalyse berücksichtigt werden, kann diese hiermit ein- oder ausgeschaltet werden.

12.8 Calorific value

Enabling takes account of negative qA and ETA values in the measurement. This function should be always active for calorific value systems, so that measurement results are valid.

12.9 Extended fuel table

The fuel table, which includes light fuel oil, natural gas, LPG propane, heavy fuel oil and pellets is extended by the following fuels:
wood, brown coal, hard coal, coal briquettes, coal coke, anthracite, biogas, LPG butane, coal gas, coke oven gas.

12.10 Average measurement

Die 30-sekündige Mittelwertmessung in Anlehnung an BImSchV während der Abgasmessung kann ein- oder ausgeschaltet werden.

12.12 Auto-Off

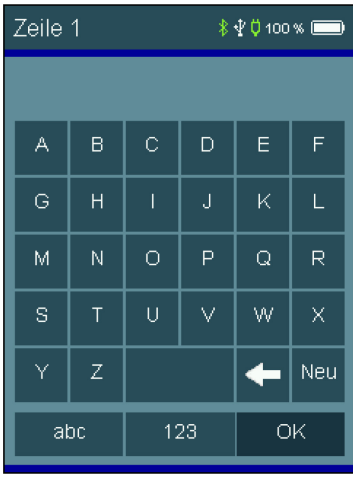
With this function, the automatic shutdown can be set to 60s,120s,240s or turned off.

12.13 Language

This function can be used to set a country-specific language configuration.

12.14 Printer footer

MThis function can be used to change the printer foot text for the Bluetooth printer line by line. Under "**Enter**" the lines are to be edited.



Press OK after typing changes to the next line.

12.15 Printer

With this function, a Bluetooth printer can be selected and set as the default printer. To do this, turn on the printer and select "**Printer**". The device will now search for available printers. To search again, press "**Search**". If printers are available, they appear in the list. With a double tap, the default printer can be selected. This printer remains selected, making it the default printer. If the default printer is to be changed, a different printer can be selected in these settings.
With "**Test Print**" the selected printer can be checked for function.
With "**Back**" the default printer selected last remains active.

13. Warnings and error messages

During the switch-on phase and during measurement operation, the measuring instrument checks the correct functioning. Warnings and error messages are displayed after the startup phase or during normal operation.

Possible ads:

Next maintenance
If a regular maintenance is to be carried out, the measuring instrument reminds of the maintenance date from one month before the due date.

Clock not set
Date and time must be set, e.B. after deep discharge of the battery.

Ladekontrolle
The battery needs to be charged.

Settings
Check settings and change them if necessary.

Druckertexte
An error has occurred in the printer texts. Re-enter printer texts or copy them from your PC.

Printer
Connection failed. Check the printer.
Check the printer and distance from the device (restart the printer if necessary). Printer must be turned on and not paired with another device.

Memory
Confirm the "Reinitialize data store?" query. The measurement data memory is deleted.

Calibration
An error has occurred in the calibration data. Give device for service.

Options
An error has occurred in the options. Give device for service.

Fuel table
An error has occurred in the fuel table. Give device for service.

Bluetooth
An error has occurred in the Bluetooth configuration. Give device for service.

Pump adjustment
An error has occurred in the pump adjustment. Give device for service.

14. Power supply

14.1 General information on power supply

A rechargeable lithium-ion battery built into the measuring device enables mains-independent operation. The operating time with a fully charged battery is up to 8 hours, depending on the type of measurements and the display brightness set, this may vary.

14.2 Charging the battery

The state of charge of the battery is monitored by the measuring device and displayed on the display. The battery symbol on the display shows the state of charge. The device should now be charged. Charge the meter only with a USB power supply with 5 V DC / 1.5 A. In case of prolonged non-use, we recommend a monthly recharge. To ensure full functionality, the battery should be charged for at least 8 hours. The USB power supply belonging to the device is designed for operation on 100 – 240 V AC. For safety reasons, the perfect condition of the power supply should be checked regularly.

The charging process takes 1 – 4 hours, depending on the state of charge. During charging, the LED of the device flashes. After the end of the charging process, the flashing changes to a permanent light. This means that the battery is fully charged and is now powered by a maintenance charging current.

If the battery is not charged, the device is automatically switched off. If the meter can no longer be switched on due to undervoltage, the USB power supply must be connected and the device must be switched on again!!

For longer storage with discharged battery, the sensors require a run-in phase after recharging.

A deep discharge of the battery should be avoided, because this can shorten the life of the battery.

15. Specifications

15.1 General technical data

Display:	Colour display with touchscreen
Interfaces:	USB-C, Bluetooth LE
Power supply:	Li-Ion battery, 3,6 V, 2700 mAh, charge level indicator, ;USB-C 5 V DC; 1,5 A
Battery life:	typical 8 hours
Dimensions:	90 x 230 x 35 mm (W x H x D)
Weight:	approx. 425 g
Operating temperature:	+ 5 °C ... + 40 °C
Storage temp.:	- 20 °C ... + 50 °C
Humidity:	10 - 90 % RH, non-condensing
Air pressure:	800 bis 1100 hPa
Certification:	DIN EN 50379 Part 1 and Part 3

15.2 Technical data Exhaust gas and pressure measurements

Display	Measuring principle	Measuring range	Resolution	Accuracy
Combustion air temperature	Thermocouple	- 10 … + 100°C	0.1 °C	< ± 1 °C
Flue gas temperature	Thermocouple	0 … + 600 °C	0.1 °C (< 100 °C) 1 °C (≥ 100 °C)	< ± 2 °C oder < ± 1.5 % of MV*
O_2, oxygen	El.-chem. sensor	0 … 25 Vol %	0.1 Vol %	< ± 0.3 Vol %
CO, carbon monoxide	El.-chem. sensor	0 … 8,000 ppm	1 ppm	0 … 2,000 ppm: < ± 20 ppm oder < ± 5 % of MV* 2,000 … 4,000 ppm: < ± 10 % of MV*
Draft**	Piezo-bridge	- 50 … + 200 Pa	1 Pa	< ± 2 Pa oder < ± 5 % of MV*
Pressure**	Piezo-bridge	0 … 100 hPa (mbar) + 100 … 160 hPa (mbar)	0.01 hPa (mbar) 0.1 hPa (mbar)	0.5 hPa (mbar) oder < ± 1 % of MV* < ± 5 % of MV*

*MV = measurement value
** = Pmax. 750 hPa (mbar)

Calculated values

CO, undiluted	calculated	0 … 9,999 ppm	1 ppm
CO_2, carbon dioxide	calculated	0 … CO_2 max.	0.1 Vol %
Flue gas losses	calculated	0 … + 100 % - 20 … + 100 %***	0.1 %
Efficiency	calculated	0 … + 100 % 0 … + 120 %***	0.1 %
Excess air	calculated	1.00 … 9.99	0.01

*** = taking into account oft he gain in calorific value

16. Maintenance and care

In order to maintain measurement accuracy and safe function, the measuring instrument should be checked once a year by an authorized service partner and readjusted if necessary.

The device can be cleaned with a damp, non-wet, cloth. Do not use chemical detergents. Make sure that the device connections are not clogged or dirty.

17. Consumables and accessories

5600907	Consumables set incl. 10 filter fleece and 5 filter discs
5601048	BTLE/IR Printer
5690151	Printer paper for printers
5680124	USB-Power supply 100 – 240 VAC
5650880	USB-C cable
5600890	Flue gas probe FG4x00
5610901	Gas pressure hose with bayonet connection
5610950	Mount-Kit

18. Managing PC measuring data

To download the measurement data management, register with the device number and your address data on our website www.draeger-msi.de under the menu item **Services → Downloads**. After filling out the form and registering, you can install the software on your PC. The necessary USB drivers are installed automatically.