

# **WÖHLER**

## **EFFICIENT MEASUREMENT**



**Wöhler A 450 Flue Gas Analyser**  
Forward-thinking with cutting-edge technology

 Made in Germany



# Wöhler A 450 Flue Gas Analyser

## The compact class – robust and smart

This is where Wöhler excels: A reasonably priced flue gas analyser that offers all measurement and setting functions. A small and lightweight flue gas analyser that impresses with its robust housing. A hand-held device with convenient touchscreen operation that also displays the measurement data on smart devices.

### Compact with a full range of functions

The Wöhler A 450 is a robust measuring device that combines solid workmanship with a clear colour display. All measured values are shown here at a glance. It is a real all-rounder: Flue gas measurement, draught measurement, annular gap measurement, burner adjustment aid, adjustment work on gas/oil systems and even on solid fuel fireplaces. Typical Wöhler.

The device is compact and lightweight, so convenient handling is guaranteed. The operation is extremely simple: The menu is organised with icons, just like a smartphone. To access the individual menu items, the user simply needs to tap on the touch display.

### Smart functions

In addition to the ease of use via the touch display, the Wöhler A 450 offers the advantages of smart devices: All measurement data can be transferred to a smartphone or tablet via WiFi (Android and iOS). There, the measured values are displayed in the Wöhler Flue Gas Analysis App either as numerical values or graphics. The app gives you even more options: You can start and stop the measurement via your end device. This is particularly useful for measuring points that are difficult to access. The measurement data can be saved in various formats and sent to your customer by e-mail.



5" touch display



48 months warranty <sup>1)</sup>



CO-Sensor up to 100,000 ppm <sup>1)</sup>



Printout on site



Burner setting aid



USB



WiFi



PC software



Flue Gas Analysis App

<sup>1)</sup> O<sub>2</sub> sensor and CO sensor 10,000 ppm  
48 months, CO sensors 5,000 ppm and  
100,000 ppm 24 months; excluding  
thermocouple, rechargeable battery and  
optional  
NO sensor. For further information, please  
refer to our General Terms and Conditions.



Tuning Guide: Graphic tuning guide for quick and reliable setting of the required value.



5" large colour touchscreen: All measurement and calculation values at a glance - Simple operation via touch display - Structured menu navigation.

## Advantages

- ▶ CO sensor available between 5,000 and 100,000 ppm
- ▶ Robust all-rounder with all measuring and setting functions
- ▶ High-resolution 5" touch display with:  
14 measured values at a glance
- ▶ Safety due to high CO measuring range
- ▶ TÜV-certified for measurements on combined heat and power plants even without additional accessories
- ▶ Future-proof networking thanks to WiFi
- ▶ Free Wöhler Flue Gas Analysis App for Android and iOS



# >> Technical Data

## Display

Touch display: 5"

## Sensors

up to 3	
O <sub>2</sub> :	0...21 Vol. %
CO:	0...5,000 ppm 0...10,000 ppm 0...10,000 ppm H <sub>2</sub> compensated 0...100,000 ppm
NO:	0...3,000 ppm

## Power supply

Lithium-ion  
rechargeable battery: 6 h service life  
16 h service life

## Weight

from 620 g

## Safety

4 filter technology with filter monitoring

## Application

- ▶ Residential flue gas analysis
- ▶ Service and maintenance tasks
- ▶ Determine flue gas loss and burner tuning
- ▶ Immission control measurements (1st BImSchV)
- ▶ NO measurement (optional)
- ▶ Differential pressure / gas pressure measurement

## Functionality

- ▶ Simple to use: Switch on – read off – done
- ▶ Large 5" color touchscreen: Displays up to 14 measurement readings
- ▶ Easy to use with the on-screen keyboard.
- ▶ Graphic hotspot search

## Safety / Reliability

- ▶ 24 or 48 months warranty without maintenance agreement<sup>1)</sup>
- ▶ Effective condensate protection
- ▶ Multistage filter technology incl. water stop filter
- ▶ Electronic filter monitor with illuminated condensate trap
- ▶ Analyser and sensor diagnostics
- ▶ Field replaceable sensors – user-friendly
- ▶ Rechargeable battery operating time: up to 17 hrs with lithium ion power
- ▶ Hose assembly – robust and flexible

## Data management

- ▶ Store up to 1,000 customer records
- ▶ Data transmission by USB, Wireless LAN or infra-red
- ▶ Flue Gas Analysis App included

TUV test registered for 1st BImSchV (German Federal Immission Control Act and KÜO (German sweeping and inspection ordinance), for oil or gas firing installations to VDI 4206 Part 1 and DIN EN 50379 Part 2

<sup>1)</sup> O<sub>2</sub> sensor and CO sensor 10,000 ppm 48 months, CO sensors 5,000 ppm and 100,000 ppm 24 months; excluding thermocouple, rechargeable battery and optional NO sensor. For further information, please refer to our General Terms and Conditions.

# Special Features



Printout on site: With the Wöhler TD 100 Thermal Fast Printer, the measurement results can be printed out directly on site.



Easy maintenance: Condensate trap can easily be pulled out to change the cotton wool and water stop filter.

# Wöhler Flue Gas Analysis App

Do you prefer to do everything with your smartphone or tablet? Then the Wöhler Flue Gas Analysis App is just the thing for your measurement and adjustment work.

- ▶ Remote control of measured values at measuring locations that are difficult to access
- ▶ Direct connection via WiFi to the smart device and future-proof internet access
- ▶ Measurement report can be sent from smartphone / tablet by e-mail and via messenger services



# Basic Sets



	Wöhler A 450 L Flue Gas Analyser 5.000 ppm CO-Sensor	Wöhler A 450 L Flue Gas Analyser 100.000 ppm CO-Sensor	Wöhler A 450 Flue Gas Analyser 10.000 ppm CO-Sensor	Wöhler A 450 H Flue Gas Analyser 10.000 ppm CO-Sensor (H <sub>2</sub> comp.)
Residential	●	●	●	●
Manifold and Differential Pressure	●	●	●	●
Wöhler Tuning Guide	●	●	●	●
Data Management	●	●	●	●
O <sub>2</sub>	0...21 %	0...21 %	0...21 %	0...21 %
CO Gas/oil systems	0...5,000 ppm	0...100,000 ppm	0...10,000 ppm	0...10,000 ppm H <sub>2</sub> compensated
CO Solid fuel systems	0...5,000 ppm	0...100,000 ppm	0...10,000 ppm	0...10,000 ppm H <sub>2</sub> compensated
NO	0...3,000 ppm optional	0...3,000 ppm optional	0...3,000 ppm optional	0...3,000 ppm optional
Flue gas temperature	-20...800 °C	-20...800 °C	-20...800 °C	-20...800 °C
Air temperature	-20...100 °C	-20...100 °C	-20...100 °C	-20...100 °C
Differential pressure	± 110 hPa	± 110 hPa	± 110 hPa	110 hPa
Warranty	2 years	2 years	4 years	4 years
Scope of delivery				
Wöhler A 450 L Flue Gas Analyser	●	●		
Wöhler A 450 Flue Gas Analyser			●	
Wöhler A 450 H Flue Gas Analyser				●
5.000 ppm CO-Sensor	●			
10,000 ppm CO-Sensor			●	
10,000 ppm CO-Sensor H <sub>2</sub> compensated				●
100,000 ppm CO-Sensor		●		
WiFi, USB and IR interface	●	●	●	●
Flue gas probe 250 mm with 1.5 m hose	●	●	●	●
Cotton filters (25 pieces)	●	●	●	●
USB charger with micro USB cable	●	●	●	●
Lithium ion rechargeable battery 6 hrs service life	●	●		
Lithium ion rechargeable battery 16 hrs service life			●	●
Article no.	4503 J	4672 J	5181 J	7165 J
Optional with NO sensor	4703 J	4979 J	5341 J	7183 J

● = included

optional = for retrofitting or upgrading form the factory, please contact us















# Accessory Sets









	Kit Maintenance Tasks	Kit Maintenance Tasks
Scope of delivery		
Threaded Cone stainless steel for probes Ø 8 mm, to stabilise the gas probe in the flue pipe	●	●
Servicebag incl. 1 water stop filter, 1 coarse filter, 25 wadding filters, silicone grease (6 g), various o-rings	●	●
Plastic case MIDI	●	●
Wöhler TD 100 Thermal Fast Printer, Infrared printer with 1 roll thermal paper and four batteries		●
10 rolls Thermal Paper for Wöhler TD 100 Thermal Fast Printer		●
Article no.	11371 J	11372 J

● = included

>> Accessories

Documentation		Article no.
	<b>Wöhler TD 100 Thermal Fast Printer</b> Infrared printer with 1 roll thermal paper and four batteries	4160 I
	<b>Thermal Paper</b> for Wöhler TD 100 Thermal Fast Printer 10 rolls	4145 I
	<b>PC-Software Wöhler A 450</b> Languages: EN / FR / IT / CZ / NL / CN for online measurements, diagram functions and export to MS Excel	4499 J
	<b>Flue Gas Analysis App</b> Available for both Android and iOS devices! The Flue Gas Analysis App is precisely what you need for your measuring and adjustment tasks.	 
Charger		
	<b>Charger</b>	5502 J
Transport		
	<b>Plastic Case MIDI</b>	6594 J
	<b>Plastic Case MAXI</b>	4704 J
	<b>Backpack</b>	5101 J
Probes		
	<b>Air Temperature Plug</b>	5517 J
	<b>Probe</b> 250 mm with 1.5 m hose	4498 J
	<b>Air Temperature Probe</b> 220 mm with 1.8 m cable	545 K
	<b>Extension Cable Hose</b> 2.8 m	7772 J

Cones		Article no.
	<b>Threaded Cone</b> for probes Ø 8 mm stainless steel, to stabilise the gas probe in the flue pipe	1235 K
	<b>Clamping Cone</b> for probes Ø 8 mm stainless steel, to stabilise the gas probe in the flue pipe	2494 K
	<b>PTFE Cone</b> for air temp. probes Ø 8 mm to stabilise air temperature probes in openings Ø 10 – 15 mm	2463 K
Consumables		
	<b>Servicebag</b> incl. 1 water stop filter, 1 coarse filter, 25 wadding filters, silicone grease (6 g), various o-rings	4734 K
	<b>Wadding filters</b> pack of 25	4286 K
	pack of 150	4288 K
	<b>Water Stop Filters</b> pack of 3	9621 K
Sensors field replaceable		
O <sub>2</sub> -Sensor	0...21 Vol. %	8963 C
CO-Sensor	5,000 ppm	8964 C
	10,000 ppm	8967 C
	10,000 ppm H <sub>2</sub> compensated	8966 C
	100,000 ppm	8965 C
NO-Sensor	3,000 ppm	8969 C
Checking Charge	Pre- and final inspection, calibration and adjustment	439 X



Scan the QR code and find out more!

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