WÖHLER

SIMPLE YET POWERFUL

Wöhler A 550 INDUSTRIAL
Flue Gas Analyser

The premium measuring tool

PLUS X AWARD®
honoured as:
BEST BRAND
OF THE YEAR
2025
Measuring Devices
www.plusxaward.com

Made in Germany

Wöhler A 550 INDUSTRIAL Flue Gas Analyser

Trust our Portable Flue Gas Analyser for precise measurements every time

The Wöhler A 550 INDUSTRIAL is designed to withstand the toughest environments and the most challenging conditions. Despite its ruggedness, it is as convenient as a smartphone. Whether it's coal power plants or high temperature industrial processes, this analyser will always deliver accurate measurement results. The user-friendly interface, with its large 7" colour touchscreen, allows for intuitive operation just like a smartphone. The screen is brightly lit and easy to read in any setting.

Obtaining measurement values is a breeze with the Wöhler A 550 INDUSTRIAL. It can accommodate up to 5 sensors at once, offering a wide range of options including NO_2, SO_2, NO, CO_2 NDIR, and H_2S. O_2 and CO sensors are always included, with a range of up to 100,000 ppm. You won't miss out on any application. Data transfer is made easy with multiple interfaces available, including USB, infrared, and WiFi. Additionally, the Wöhler TD 100 Thermal Fast Printer allows you to print out readings on-site.

The battery-driven peltier cooler ensures accurate NO_x and SO_x readings, while also providing off-grid flexibility. For added protection against industrial dust loads, you can opt for the stainless steel sinter-filter. The Wöhler A 550 INDUSTRIAL offers a variety of sample probe lengths, making it possible to take emission measurements in hard-to-reach locations. To measure flue gas velocity and flow rate, it is equipped with a dual port digital pressure sensor. Different lengths and dimensions of S-Tubes and Prandl-probes are available.

With the high temperature probe, you can perform measurements in environments with temperatures up to 1,200 °C. It comes with a sinter-filter for extreme conditions and can be extended from 1 meter to 2 meters. At both lengths, it can be equipped with a thermo-couple for in-stack temperature measurements.

12 months warranty [1)]

Robust housing

Sensor diagnostic

CO-Sensor 100,000 ppm
CO-Sensor 10,000 ppm (H_2-compensated)
NO_2-Sensor 1,000 ppm
SO_2-Sensor 5,000 ppm
CO_2 NDIR-Sensor 0...40 Vol. %
H_2S-Sensor 350 ppm

Flue Gas Analysis App

WiFi

Infrared

USB

Printout on site

[1)] Except for thermocouples, rechargeable batteries and special sensors; for further information pleae see our Terms and Conditions.

The Wöhler A 550 INDUSTRIAL Flue Gas Analyser: Built for the toughest environments! Durable and sturdy with precise measurements. Incredibly versatile for a wide variety of uses.

Easy to attach: Our heat protection shield ensures your safety and the safety of your device while measuring at high temperature spots of up to 1,200 °C. Additionally, you have the flexibility to measure at various spots by extending the probe from 1 m to 2 m if needed.

Advantages

- NO_x and SO_x measurement with 0.1 ppm resolution
- High temperature probe up to 1,200 °C with in-stack sinter-filter
- Battery-driven peltier cooler – optimal gas preparation for accurate measurements
- High-power sample pump for differential pressures up to 300 mbar
- Built-in logger function for long term measurements with user selectable configuration
- Up to 5 Sensors at a time, choice of 8 parameters in total

Technical Data

Temperature ranges

Storage temperature:	-20...50 °C
Operating temperature:	5...40 °C to maintain stated accuracy
Measurement range:	0...1,200 °C

Power supply

Lithium-Ion battery:	rechargeable, 3.7 V / 6,700 mAh, charges via USB
Battery operating time:	approx. 7 h (depends on operating status and display illumination)

Dimensions

Weight:	1,250 g
Dimensions:	220 x 160 x 55 mm (w/o probe)
Length of cable-hose:	3 m

Application

- For industrial heating systems
- For burner adjustment and determination of combustion loss
- For commercial and industrial applications
- In-stack sinter-filter for heavy dust loaded samples
- High temperature processes

Functionality

- Simple to use: Switch on – read – off – done
- Large, colour touchscreen: Displays up to 14 measurement and calculation values
- Intuitive to operate via on-screen keyboard
- Calibration in the flue gas pipe via fresh air pump
- Graphical hot spot search
- 12 month warranty without maintenance contract [1)]

Safety / Reliability

- Effective dust and condensate protection
- Analyser and sensor diagnostics
- Sensor replacement – user-friendly
- Rechargeable battery: more than 7 h with Lithium-ion power
- Hose assembly – robust and flexible

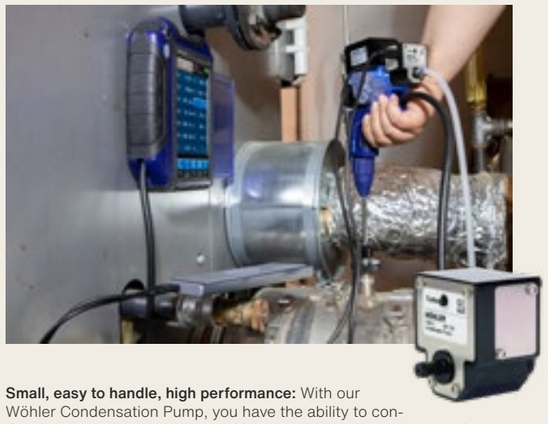
Data management

- 1,000 measurement records
- Compatible with the Flue Gas Analysis App for Android and iOS
- Data transfer via USB, WiFi or Infrared

[1)] Except for thermocouples, rechargeable batteries and special sensors; for further information please see our Terms and Conditions.

Special Features

Clean job: When the Wöhler Peltier Cooler is connected, the flue gas will flow through and become completely dry. This guarantees that only pure and dry flue gas goes into the device, ensuring accurate results.



Small, easy to handle, high performance: With our Wöhler Condensation Pump, you have the ability to conduct long term measurements with greater accuracy and convenience than ever before.

Wöhler Flue Gas Analysis App

Do you prefer to do everything with your smartphone or tablet? Then the Flue Gas Analysis App is exactly the right choice for your measuring and adjustment work. No matter if you are using an Android or iOS device.

- Remote control of measured values in hard to reach measurement locations
- Direct connection via WiFi to the Smart Device and future-proof internet compatibility
- Sending the measurement protocol from smartphone / tablet via e-mail and messenger services possible

Technical Data

Oxygen concentration (O_2) in flue gas	Display	Volume % referenced to dry flue gas
	Measurement principle	Electrochemical sensor
	Range	0...21 Vol. %
	Accuracy	±0.3 Vol. %
Carbon monoxide (CO 100,000 ppm) in flue gas	Display	Volume ppm referenced to dry flue gas
	Measurement principle	Electrochemical sensor
	Range	0...100,000 Vol. ppm; resolution 1 Vol. ppm
	Accuracy	±100 Vol. ppm (< 1,000 Vol. ppm), otherwise 10 % of reading (with H_2 < 5 % of reading)
Carbon monoxide (CO 10,000 ppm H_2-compensated) in flue gas	Display	Volume ppm referenced to dry flue gas
	Measurement principle	Electrochemical sensor, H_2-compensated
	Range	0...10,000 Vol. ppm; resolution 1 Vol. ppm
	Accuracy	±20 Vol. ppm (< 400 Vol. ppm), otherwise 5 % of reading
Nitric oxide concentration (NO) in flue gas	Display	Volume ppm referenced to dry flue gas
	Measurement principle	Electrochemical sensor
	Range	0...3,000 Vol. ppm (continuously up to 1,000); resolution 0.1 Vol. ppm (< 1,000 Vol. ppm), otherwise 1 Vol. ppm
	Accuracy	±5 Vol. ppm (< 100 Vol. ppm), otherwise 5 % of reading
Nitrogen dioxide concentration (NO_2) in flue gas	Display	Volume ppm referenced to dry flue gas
	Measurement principle	Electrochemical sensor
	Range	0...1,000 Vol. ppm (continuously up to 200 Vol. ppm); resolution 0.1 Vol. ppm
	Accuracy	±5 Vol. ppm (< 100 ppm), otherwise 5 % of reading
Sulphur dioxide concentration (SO_2) in flue gas	Display	Volume ppm referenced to dry flue gas
	Measurement principle	Electrochemical sensor
	Range	0...5,000 Vol. ppm; resolution 0.1 Vol. ppm (< 1,000 Vol. ppm), otherwise 1 Vol. ppm
	Accuracy	±10 Vol. ppm (< 200 Vol. ppm), otherwise 5 % of reading
CO_2 NDIR	Display	Carbon dioxide concentration
	Measurement principle	NDIR
	Range	0...40 Vol. %
	Accuracy	0...6 Vol. %: ±0.3 Vol. % 6...40 Vol. %: ±5 % of reading

H_2S	Display	Volume ppm referenced to dry flue gas
	Measurement principle	Electrochemical sensor
	Range	0...350 ppm
	Accuracy	0...40 ppm: ±2 ppm 40...350 ppm: ±5 % of reading
Differential pressure (P_D)	Display	Pascal
	Measurement principle	Semi-conductor diaphragm
	Range	0...±110 hPa; resolution 0.1 Pa (< 1,000 Pa), otherwise 1 Pa
	Accuracy	0.3 Pa (< 10 Pa), otherwise 3 % of reading
Flue Gas Temperature (T_S) High Temperature Probe	Display	°C / °F
	Measurement principle	Thermocouple Type K (NiCr-Ni)
	Range	-20...1,200 °C
	Accuracy	-20...133 °C: ±2 °C; 133...1,200 °C: ±1.5 % of reading
	Available lengths	1 m; extendable to 2 m
Flue gas temperature (T_S)	Display	°C
	Measurement principle	Thermocouple (NiCr-Ni)
	Range	-20...800 °C; resolution 0.1 °C
	Accuracy	0...133 °C: ±2 °C; 133...800 °C: ±1.5 % of reading
Combustion air temperature (T_A)	Display	°C / °F
	Measurement principle	Thermocouple (NiCr-Ni)
	Range	-20...100 °C; resolution 0.1 °C
	Accuracy	±1 °C
	Available lengths	295 / 500 / 1,000 mm

configure your
Wöhler A 550 INDUSTRIAL
Flue Gas Analyser
with up to **5 Sensors**

- decide which sensor variation suits your requirements

Basic Sets

Scope of delivery	Wöhler A 550 INDUSTRIAL Flue Gas Analyser ready for measurement	Wöhler A 550 INDUSTRIAL Flue Gas Analyser configurable basic version	Wöhler A 550 INDUSTRIAL Flue Gas Analyser configurable basic version
Wöhler A 550 INDUSTRIAL Flue Gas Analyser	●	●	●
Peltier cooler	●	○	○
O_2-Sensor	●	●	●
100,000 ppm CO_H-Sensor	●	●	○
10,000 ppm CO_N-Sensor (H_2-comp.)	○	○	●
3,000 ppm NO-Sensor	●	○	○
1,000 ppm NO_2-Sensor	●	○	○
5,000 ppm SO_2-Sensor	●	○	○
CO_2 NDIR-Sensor	○	○	○
350 ppm H_2S-Sensor	○	○	○
Gas probe 1,000 mm with stainless steel sinter-filter (up to 800 °C)	●	○	○
High temperature probe 1,000 mm for measurements (up to 1,200 °C)	○	○	○
Probe extension 1,000 mm (up to 1,200 °C)	○	○	○
Heat protective shield	○	○	○
Article no.	2948 J	2947 J	8702 J

● = included
○ = for retrofitting or upgrading from the factory, please contact us

Order online now! **woehler-international.com/article-no.**

Accessories

Probes up to 800 °C				Article no.
	Gas Probe			
	295 mm			9622 J
	500 mm			9614 J
	1,000 mm			9695 J
	1,000 mm	with stainless steel sinter-filter		4189 J
	**Stainless steel Sinter-filter** replacement-filter			4187 J
Probes up to 1,200 °C				
	**High temperature probe**	1,000 mm	with pre-filter and carrying bag	2291 J
	**High temperature probe**	1,000 mm	without pre-filter and carrying bag	2936 J
	Probe extension	1,000 mm	for high temperature probe	2293 J
	**Thermo couple extension**	2,000 mm	for high temperature probe	6599 J
	**Pre-filter**		for high temperature probe	2298 J
	**Replacement-filter**		for high temperature probe	2953 J
	**Heat protective shield**		for high temperature probe	2966 J
	Safety Pins to fix the Sinter-filter 10 pieces		for high temperature probe	11063 K
Probes				
	**Air Temperature Plug**			5517 J
	**Air Temperature Probe** 220 mm / 1,8 m Cable			6545 J
	**Velocity Probe Type S**			5579 J
Warranty				
	Warranty extension (by 1 year)			599 I
Sensors				
	**O_2-Sensor**	field replaceable	0...21 Vol. %	5594 C
	**CO_H-Sensor**	field replaceable	100,000 ppm	5596 C
	**CO_N-Sensor**	field replaceable	10,000 ppm H_2-compensated	11037 C
	**NO-Sensor**	field replaceable	3,000 ppm	5597 C
	**NO_2-Sensor**	field replaceable	1,000 ppm	5598 C
	**SO_2-Sensor**	field replaceable	5,000 ppm	5665 C

				Article no.
	**CO_2 NDIR-Sensor**	field replaceable	0...40 Vol. %	11011 K
	**H_2S-Sensor**	field replaceable	350 ppm	11014 K
Peltier Cooler				
	**USB Peltier Cooler** • Portable Peltier Cooler with external mobile battery to remove condensate • Operational time up to 5h. To be used for accurate SO_2 or NO_2 flue gas analysis incl. 10,000 mAh mobile battery pack, 3 m USB connection cable, Angle Adapter Peltier Cooler			12111 J
USB-C-Condensate Pump				
	**USB-C-Condensate Pump** can only be used in conjunction with the USB-C Peltier cooler to continuously pump out condensate during long-term measurements			12112 J
Pitot tubes				
	**Pitot tube** Ø 7 mm 1,000 mm			9489 O
	500 mm			9488 O
	350 mm			9487 O
Documentation				
	**Wöhler TD 100 Thermal Fast Printer** Infrared printer with 1 roll thermal paper and four batteries			4160 I
	**Thermal Paper** for Thermal Printer Wöhler TD 100 57 mm width, 12 m long / roll, 10 rolls			4145 I
	**PC-Software Wöhler A 550 INT** for online measurements, diagram functions and export to MS Excel Languages: EN / FR / IT / CZ. This Wöhler PC software is used to evaluate and manage the measured data. There is the possibility for online measurement as well as export of data to MS Excel for graphically displayed data. The software is available for download. You will receive a separate email with the download link.			4428 J
	**Flue Gas Analysis App** Available for both Android and iOS devices! The Flue Gas Analysis App is precisely what you need for your measuring and adjustment tasks.			free of charge
Transport				
	**Plastic Case MAXI** very robust case with foam inlet, ideal for the daily use provides enough room for the flue gas analyzer, as well as the thermo printer, soot pump kit, probes and cones			5577 J
	**Carrying bag** for flue gas probes 500 / 750 / 1,000 mm			1243 K
	**Backpack** for Wöhler A 450 / 550			5101 J
Consumables				
	**Servicebag**			4733 K
	**Water Stop Filters** pack with 3 pieces			9621 K
	**Coarse Filters** pack with 5 pieces			9632 K
	Wadding Filters pack with 150 pieces			4288 K

Scan the QR code and find out more!

WÖHLER

Wöhler Technik GmbH
Headquarters Germany
Wöhler-Platz 1 · 33181 Bad Wünnenberg
www.woehler-international.com