WÖHLER

The following readings are shown on the device display:

Coal	12:34:11 13.02.20 Cust.: John Doe	
O_2:	9.6%	T_A:	20.6 °C
CO:	852 ppm	T_S:	187.3 °C
NO:	152.3 ppm	Pr:	-3.3 Pa
NO_2:	24.7 ppm	CO_2:	10.2%
NO_x:	254.7 mg/m³	η:	90.1%
SO_2:	284.3 ppm	Q_S:	9.9%
λ:	1.84	D_{pt}:	-.- °C

Graph | Copy readings | Stop | Pump On | Menu

WÖHLER A 550 INDUSTRIAL FLUE GAS ANALYZER

The high-end measuring device

The Measure of Technology

Made in Germany

Wöhler A 550 INDUSTRIAL Flue Gas Analyzer

Portable Flue Gas Analyzer with superior accuracy

Built for the toughest environments and the most difficult conditions, but as handy as a smartphone – that's the all new Wöhler flue gas analyzer Wöhler A 550 INDUSTRIAL. From coal power plants to high temperature industrial processes, the Wöhler A 550 INDUSTRIAL will always provide measurement results at the highest accuracy.

No matter how you look at it, the new Wöhler A 550 INDUSTRIAL really is a „nifty piece of equipment": The individual functions can be launched as intuitively as using a smartphone via the large 7" color touchscreen. And the brightly lit monitor can be read anywhere. The large screen, the clear arrangement and the graphical presentation of readings allow excellent readability.

Acquiring measurement values is as easy as could be. The analyzer can be equipped with up to 5 sensors at a time, choosing from a wide range, such as NO_2, SO_2, NO, CO_2 NDIR and H_2S. Always on board are O_2 and CO with a range up to 100.000 ppm. So you will not miss any application. There are a number of interfaces available to transfer data: USB, infrared and Bluetooth®. And with the Wöhler TD 100 Thermal Fast Printer you can print out the readings on-site.

The new battery-driven peltier cooler ensures both, accurate NO_x and SO_x readings and off-grid flexibility. The optional stainless steel sinter-filter protects the device against industrial dust loads. A broad variety of different sample probe lenghts offers the opportunity to take emission measurements in difficult-to-reach locations.

To measure flue gas velocity and flow rate the Wöhler A 550 INDUSTRIAL is equipped with a dual port digital pressure sensor. S-Tubes and Prandl-probes are available in different lengths and dimensions.

With our new high temperature probe you can perform measurements in environments with a temperature up to 1.200 °C. It comes with a sinter-filter for the worst environments 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.

INDUSTRIAL	24 MONTHS WARRANTY[1]	7" TOUCH SCREEN	ROBUST HOUSING	HT 1.200 °C	SENSOR DIAGNOSTIC	USB	INFRARED	BLUETOOTH®	WÖHLER A 550 APP

PRINTER	PC SOFTWARE	LOGGER FUNCTION	CO 100.000 ppm	CO 10.000 ppm H₂-compensated	NO_2	SO_2	CO_2 NDIR	H_2S

▸ 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

The all new Wöhler A 550 INDUSTRIAL Flue Gas Analyzer: Built for the toughest environments!
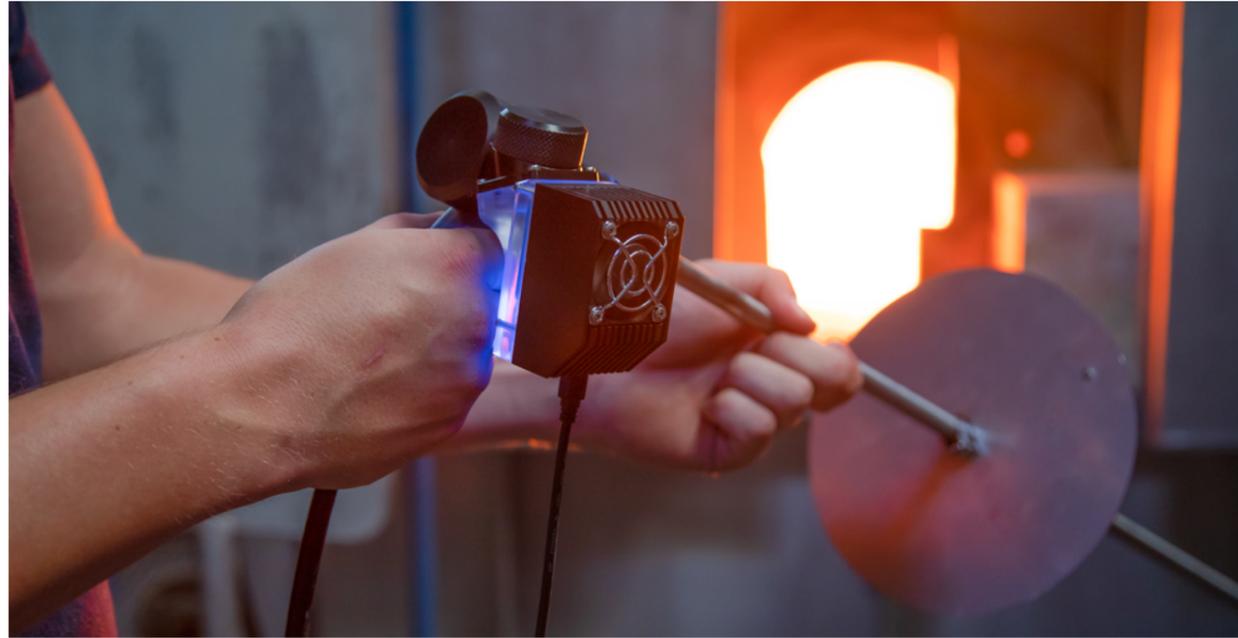
Rugged and robust while offering most accurate readings. Highly flexible for a huge range of applications.

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

The Wöhler Peltier Cooler
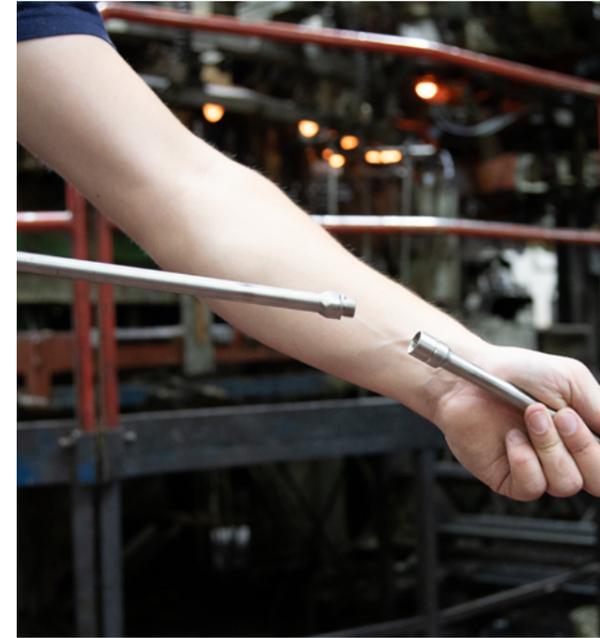Ensuring most accurate readings without limiting your flexibility

Clean job
Once attached the flue gas will pass through and will be dried completely. This way only clean and dry flue gas enters the device, ensuring accurate results.

Every detail considered
Life ain't always easy - our new Peltier cooler makes it easy and offers a solution for every tricky situation.

Highly flexible
No matter how - top down, or bottom up - with the included adapter there are no limitations in your applications.

Measurements up to 1.200 °C
Our new high temperature probe offers a solution for every application

Measuring at different spots
It's up to you: Simply extend the probe from 1 meter to 2 meters if necessary. At both lengths it can be equipped with a thermo couple for temperature measurements.

Sinter-filter for clean measurements
Tough environment? Heavy dust load? No problem! Our high temperature sinter-filter will guarantee clean measurements.

New heat protection shield
Easy to attach: protects you and your device when measuring at high temperature spots

Technical data Sensors

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 Vol. ppm), otherwise 5 % of reading
Sulfur 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$_2$S	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$_S$)	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	130 / 180 / 295 / 500 / 750 / 1.000 mm
Combustion air 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

Visit us online at **woehler-international.com/P_12740.dl**

⚒ 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, color 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
▸ 24 month warranty without maintenance contract[1]

⚐ Safety / Reliability

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

☁ Data management

▸ 1.000 measurement records
▸ Compatible with the Wöhler A 550 App for Android
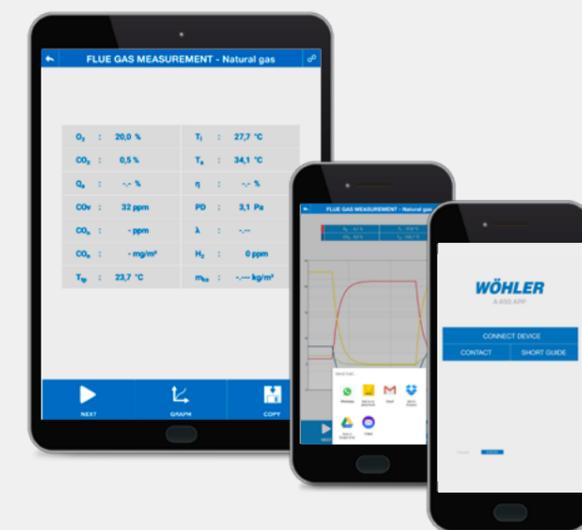▸ Data transfer via USB, Bluetooth® or Infrared

Technical data

Power supply	Lithium-Ion, rechargeable battery 3,7 V/6.700 mAh, charges via USB
Battery operating time	Approx. 7 h (depends on operating status and display illumination)
Storage temperature	-20...+50 °C
Operating temperature	5...40 °C to maintain stated accuracy
Weight	1.250 g
Dimensions	220 x 160 x 55 mm (without probe)
Length of cable-hose	3 m

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

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Wöhler A 550 App

Do you prefer to do everything with your Smartphone or tablet? Then the Wöhler A 550 App is just right for your measuring and setting tasks. This is for Android devices from version 4.1 onwards.

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

Via Bluetooth® the measured values can be sent to mobile devices and further processed via app.

GET IT ON Google Play

WÖHLER

All devices are equipped with cable hose 3 m, Bluetooth® / USB / IR, Ambient Temperature Plug, Li-Ionen Battery / USB-Charger, waterstopfilter, coarse-filter, 25 wadding-filters, plastic Case MAXI

Scope of delivery		Wöhler A 550 INDUSTRIAL Flue Gas Analyzer ready for measurement	Wöhler A 550 INDUSTRIAL Flue Gas Analyzer configurable basic version 100.000 ppm	Wöhler A 550 INDUSTRIAL Flue Gas Analyzer configurable basic version 10.000 ppm (H₂-compensated)
Scope of delivery	Wöhler A 550 INDUSTRIAL Flue Gas Analyzer	●	●	●
	Peltier cooler	●	○	○
	O_2	●	●	●
	CO_H 100.000 ppm	●	●	○
	CO_N 10.000 ppm (H_2-compensated)	○	○	●
	NO	●	○	○
	NO_2	●	○	○
	SO_2	●	○	○
	CO_2 NDIR	○	○	○
	H_2S	○	○	○
	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 | ○ = optional

O₂
CO_H   alternatively   CO_N

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

▸ decide which sensor variation
suits your requirements

CO₂ NDIR
NO₂
SO₂
H₂S
NO

Warranty	Article no.
Warranty extension (by 1 year) Wöhler A 550 IND Flue Gas Analyze	599 I

Sensors			Article no.
	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
	CO_2 NDIR-Sensor field replaceable	0…40 Vol. %	11011 K
	H_2S-Sensor field replacable	350 ppm	11014 K

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			Article no.
	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

Probes up to 1.200 °C

			Article no.
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

Peltier Cooler

	Article no.
USB Peltier Cooler portable Peltier Cooler to remove condensate to be used for accurate SO_2 or NO_2 flue gas analysis	4463 J

Comes with: USB connection cable 3 m, Angle Adapter Peltier Cooler

please purchase a power bank at your local electronics supplier
we recommand a mobile battery with 10.000 mAh

Other Probes

	Article no.
Air Temperature Plug	5517 J
Air Temperature Probe 220 mm / 1,8 m Cable	6545 J
Velocity Probe Type S	5579 J
Pitot tube Ø 7 mm	
1.000 mm	9489 O
500 mm	9488 O
350 mm	9487 O

Documentaion

	Article no.
Wöhler TD 100 Thermal Fast Printer Infrared printer with 1 roll thermal paper and four batteries	4160 I
Thermal Paper 57 mm width, 12 m long/ roll, 10 rolls for Thermal Printer Wöhler TD 100	4145 I
PC-Software Wöhler A 550 INT Languages: EN / FR / IT / CZ	4428 J

for online measurements, diagram functions and export to MS Excel

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.

Wöhler A 550 App The app is available on the Play Store.	free of charge

With this app, the measured values of the Wöhler A 550 can be displayed graphically and numerically on the smartphone, exported and transferred to a mobile management program.

Transport

	Article no.
Heavy Duty Carrying Case MAXI very robust case with foam inlet, ideal for the daily use	5577 J

provides enough room for the flue gas analyzer, as well as the thermo printer, soot pump kit, probes and cones

Carrying bag for flue gas probes 500 / 750 / 1.000 mm	1243 K
Backpack for Wöhler A 450 / 550	5101 J

Consumables

	Article no.
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

Order Form

Product	Article no.	Qty.

Notes

_____

_____

_____

_____

_____

_____

Billing address / customer

Company _____

Name _____

Street / house no. _____

ZIP code / City _____

Country _____

Telephone _____

Mobile _____

Customer number ☐ ☐ ☐ ☐ ☐ ☐

Date _____

Delivery address (if different to billing address)

Company _____

Name _____

Street / house no. _____

ZIP code / City _____

Country _____

Fax _____

E-Mail _____

Signature or company stamp _____

Your contact

WÖHLER

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