

# WÖHLER



## POWERFULLY TOUGH.

### Wöhler A 550 INDUSTRIAL

Portable Flue Gas Emissions Analyzer

*The Measure of Technology*



Made in  
Germany



**CO**  
100,000  
ppm

**NOx**  
**SOx**



**PC**  
SOFTWARE



# Wöhler A 550 INDUSTRIAL

## Portable Flue Gas Emissions Analyzer with superior accuracy

As tough as cast iron, but as easy to operate as a smartphone – that's what Wöhler's new Flue Gas Emissions Analyzer feels like in your hand. A tap of your finger on the Wöhler A 550 INDUSTRIAL is all that is required to perform a complete analysis and inspection of boilers and burners. The Flue Gas Emissions Analyzer is designed to be used in tough industrial heat processes. The in-stack stainless steel sinter-filter probe protects the analyzer against heavy dust loads.

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.

### „Smart“ handling features

Acquiring measurement values is as easy as could be. The analyzer is equipped with magnets, so you can attach it to any magnetic objects to work hands-free. The probe is equipped with a start/stop button to run or hold measurement readings. There are a number of interfaces available to transfer

data: USB, infrared and Bluetooth®. And with the Wöhler TD 100 Fast Thermal Printer you can print out the readings on-site.

The new battery-driven peltier cooler ensures both accurate NOx and SOx 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 lengths 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 length and dimensions.

## ADVANTAGES

- 7" color-touchscreen as intuitive to use as a smartphone
- NOx and SOx emissions measurement with 0,1 ppm resolution
- In-stack sinter-filter probe for dust protection
- Battery-driven peltier cooler device – more than 4 h off-grid operation time
- High-power sample pump for differential pressures up to 300 mbar
- Built-in logger function with user selectable configuration



#### Sinter-Filter Probe

Removes dust (> 20 µm) from the sample gas to protect the Analyzer against heavy dust loads.



#### Battery-driven Peltier cooler

Removes condensate from the sample gas for accurate NO<sub>x</sub> and SO<sub>x</sub> measurements.

### TECHNICAL DATA

#### Oxygen concentration (O<sub>2</sub>) in flue gas

Display ..... Volume % referenced to dry flue gas

Measurement principle ..... Electrochemical sensor

Range ..... 0.0 ... 21.0 Vol. %

Accuracy ..... ±0.3 Vol. %

#### Carbon monoxide (CO 100,000) 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<sub>2</sub> < 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<sub>2</sub>) 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

#### Sulfur dioxide concentration (SO<sub>2</sub>) 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

#### Differential pressure (P<sub>D</sub>)

Display ..... Pascal

Measurement principle ..... Semi-conductor diaphragm

Range ..... 0.00 ... ±110.00 hPa;  
resolution 0.1 Pa (< 1,000 Pa), otherwise 1 Pa

Accuracy ..... 0.3 Pa (< 10.0 Pa), otherwise 3 % of reading

#### Flue gas temperature (T<sub>g</sub>)

Display ..... °C

Measurement principle ..... Thermocouple (NiCr-Ni) (NiCr-Ni)

Range ..... -20.0 ... 800 °C; resolution 0.1 °C

Accuracy ..... 0 ... 133 °C: ±2 °C  
133 ... 800 °C: ±1.5 % of reading

#### Combustion air temperature (T<sub>A</sub>)

Display ..... °C

Measurement principle ..... Thermocouple (NiCr-Ni)

Range ..... -20.0 ... 100 °C; resolution 0.1 °C

Accuracy ..... ±1 °C

**Power supply** ..... Lithium-Ion, rechargeable battery 3.7 V, 5800 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** ..... 1,700 mm

### ⚙️ 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
- Calibrate in the flue gas pipe via a fresh air pump
- Graphic hot spot search

### 🛡️ Safety / Reliability

- Effective dust and condensate protection
- 4-filter technology – easily accessible
- Analyzer and sensor diagnostics
- Sensor replacement – user-friendly
- Rechargeable battery operating time: more than 7 h with Lithium Ion power
- Hose assembly – robust and flexible

### ✂️ Wide range of applications

- For measurements: NO, NO<sub>2</sub>, SO<sub>2</sub>
- Probe for a variety of measurement tasks
- In-stack sinter-filter for heavy dust loaded samples

### 📁 Data management

- 1,000 measurement records
- Data transfer via USB, Bluetooth or infrared

### 📜 Approvals

- DIN EN 50379 Part 2

# Wöhler A 550 INDUSTRIAL

Portable Flue Gas Emissions Analyzer with superior accuracy



## 1. Basic set (ready to use)

### Wöhler A 550 INDUSTRIAL

#### Scope of delivery

Wöhler A 550 INDUSTRIAL

O<sub>2</sub>, NO, CO<sub>HIGH</sub>, NO<sub>2</sub>, SO<sub>2</sub>

Bluetooth, USB- and IR

Cable hose 3,0 m

Changeable Gas Probe 1000 mm with sinter filter

Ambient Temperature Probe (plug)

USB-Charger with Micro-USB-Cable

Li-Ionen Battery



















1 waterstop filter

1 coarse filter

25 wadding filters

Plastic Case Maxi

Article no. 5996 J

Accessories Wöhler A 550 INDUSTRIAL		Article no.
	<b>Gas Probe</b> 1000 mm with stainless steel sinter-filter	4189 J
	<b>Stainless Steel Sinter-Filter</b> replacement filter	4187 J
	<b>Gas Probe</b> 500 mm	9614 J
	<b>Gas Probe</b> 295 mm	9622 J
	<b>Gas Probe</b> 1000 mm with protective cap	9695 J
	<b>Velocity Probe Type S</b> to measure gas velocity	5579 J
	<b>Magnetic Holder</b> to stabilize the air temperature probe for air temperature probes	6142 K
	<b>Threaded Cone</b> stainless steel, to stabilize the gas probe in the flue pipe for probes Ø 8 mm	1235 K
	<b>PTFE Cone</b> to stabilize air temperature probes in openings Ø 10 – 15 mm for probes Ø 8 mm	2463 K
	<b>USB Peltier Cooler</b> with battery and USB cable 3 m	4435 J
	<b>Pitot Tube</b> Ø 7 mm	
	100 cm	9489 O
	50 cm	9488 O
	35 cm	9487 O
	<b>Wöhler TD 100 Thermal Fast Printer</b> Infrared printer with 1 roll thermal paper and four batteries	4160 I
	<b>Thermal Paper</b> 57 mm width, 12 m long, 10 rolls for thermal printer Wöhler TD 100, TD 600	4145 I
	<b>Heavy Duty Carrying Case MAXI</b> for Wöhler A 550 Very robust case with foam inlet, ideal for the daily use. Provides enough room for the Wöhler A 550 flue gas analyzer, as well as the thermo printer TD 100, soot pump kit, probes and cones.	5577 J
	<b>Water Stop Filters</b> pack with 3 pcs.	9621 K
	<b>Coarse Filters</b> pack with 5 pcs.	9632 K
	<b>Wadding Filters</b> pack with 150 pcs.	4288 K
	<b>PC-Software Wöhler A 550</b> for online measurements, diagram functions and export to MS Excel	4428 J

# Order Form

Article no.	Article description	qty.
5996 J	Wöhler A 550 INDUSTRIAL – Basic set	

Billing address / customer		Delivery address (if different to billing address)							
Company	_____	Company	_____						
Name	_____	Name	_____						
Street/house no.	_____	Street/house no.	_____						
ZIP code/City	_____	ZIP code/City	_____						
Country	_____	Country	_____						
Telephone	_____	Fax	_____						
Mobile	_____	E-Mail	_____						
Customer number	<table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>								
Date	_____	Signature or company stamp	_____						

**WÖHLER**

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Your contact