

# Wöhler A 550 Flue Gas Analyzer

## TECHNICAL DATA

### Oxygen concentration ( $O_2$ ) in flue gas

Display ..... Volume % referenced to dry flue gas  
 Measurement principle ..... Electrochemical sensor  
 Range ..... 0.0-21.0 vol. %  
 Accuracy .....  $\pm 0.3$  Vol.-%

### Carbon monoxide ( $CO_v$ , 4000 ppm) in flue gas (Wöhler A 550)

Display ..... Volume ppm referenced to dry flue gas  
 Measurement principle ..... Electrochemical sensor  
 Range ..... 0-4,000 vol. ppm; resolution 1 vol. ppm  
 Accuracy .....  $\pm 20$  ppm (< 400 ppm), otherwise 5% of reading

### Carbon monoxide ( $CO_v$ ) in flue gas (Wöhler A 550 L)

Display ..... Volume ppm referenced to dry flue gas  
 Measurement principle ..... Electrochemical sensor  
 Range ..... 0-35,000 vol. ppm; resolution 1 vol. ppm  
 Accuracy .....  $\pm 100$  ppm (< 1,000 ppm), otherwise 10% of reading (with  $H_2$  < 5% of reading)

### Carbon monoxide ( $CO_{v\ high}$ ) in flue gas (optional)

Display ..... Volume ppm referenced to dry flue gas  
 Measurement principle ..... Electrochemical sensor  
 Range ..... 0-100,000 vol. ppm; resolution 1 vol. ppm  
 Accuracy .....  $\pm 100$  ppm (< 1,000 ppm), otherwise 10% of reading (with  $H_2$  < 5 % of reading)

### Nitric oxide concentration ( $NO_v$ ) in flue gas (optional)

Display ..... Volume ppm referenced to dry flue gas  
 Measurement principle ..... Electrochemical Sensor  
 Range ..... 0-3,000 vol. ppm (continuously up to 1,000);  
 Resolution ..... 1 vol. ppm  
 Accuracy .....  $\pm 5$  Vol.-ppm (< 100 ppm), otherwise 5 % of reading

### Nitrogen dioxide concentration ( $NO_2$ ) in flue gas (optional)

Display ..... Volume ppm referenced to dry flue gas  
 Measurement principle ..... Electrochemical sensor  
 Range ..... 0-1000 vol. ppm (continuously up to 200); resolution 1 vol. ppm  
 Accuracy .....  $\pm 5$  vol. ppm (< 100 ppm), otherwise 5 % of reading

### Sulfur dioxide ( $SO_2$ ) in flue gas (optional)

Display ..... Volume ppm referenced to dry flue gas  
 Measurement principle ..... Electrochemical sensor  
 Range ..... 0-5,000 vol. ppm; resolution 1 vol. ppm  
 Accuracy .....  $\pm 10$  vol. ppm (0...200 ppm), otherwise 5 % of reading

### Chimney draught / differential pressure (PD) with 4 Pa test (Wöhler A 550)

Display ..... Pascal  
 Measurement principle ..... Semi-conductor diaphragm  
 Range ..... 0.00 to  $\pm 110.00$  hPa; resolution 0.1 Pa (< 1000.0 Pa), otherwise 1 Pa, with ventilation loss measurement 0.01 Pa  
 Accuracy ..... 0.3 Pa (< 10.0 Pa), otherwise 3 % of reading  
 Drift < 0.2 Pa in 5 minutes

### Chimney draught / differential pressure (PD) (Wöhler A 550 L)

Display ..... Pascal  
 Measurement principle ..... Semi-conductor diaphragm  
 Range ..... 0.00 to  $\pm 110.00$  hPa; resolution 1 Pa  
 Accuracy ..... 2 Pa (< 40 Pa), otherwise 5% of reading

### Flue gas temperature ( $T_A$ )

Display ..... °C  
 Measurement principle ..... Thermocouple (NiCr-Ni) (NiCr-Ni)  
 Range ..... -20.0 °C to 800 °C; resolution 0.1 °C  
 Accuracy ..... 0-133 °C:  $\pm 2$  °C  
 133-800 °C:  $\pm 1.5$  % of reading

### Combustion air temperature ( $T_i$ )

Display ..... °C  
 Measurement principle ..... Thermocouple (NiCr-Ni)  
 Range ..... -20.0 °C to 100 °C; resolution 0.1 °C  
 Accuracy .....  $\pm 1$  °C

### Wood moisture

Display ..... Mass of water referenced to dry fuel mass  
 Measurement principle ..... Electrical resistance measurement  
 Range ..... 10.0-40.0%; resolution 0.1%  
 Accuracy .....  $\pm 40$  % of reading tested to VDI 4206 Part 4

**Power supply** ..... Lithium-Ion, rechargeable battery 3.7 V, 5800 mAh,  
 charges via USB

**Battery operating time** ..... Approx. 12 h (depends on operating status and display illumination)

**Storage temperature** ..... -20 °C to +50 °C

**Operating temperature** ..... +5-40 °C to maintain stated accuracy

**Weight** ..... 1250 g

**Dimensions** ..... 220 x 160 x 55 mm (without probe)

**Length of cable-hose:** ..... 1700 mm