

The ASIN FG is a portable flue-gas analyser enabling a continuous measuring of the concentrations of oxygen, carbon monoxide, nitric oxide, sulphur dioxide, flue-gas temperature and stack draught. In addition to these directly measured values it calculates the carbon dioxide concentration, the excess air coefficient and the combustion efficiency. The CO, NO and SO₂ concentrations are displayed either in mg/m³ or in ppm, in absolute values or in values recalculated to the standard oxygen concentration. The concentrations of oxygen and carbon monoxide are displayed in %. Optionally the device can be equipped with a little printer which prints the actual values during the measurement. The analyser is based on a classical concept of electrochemical sensors with some new features such as higher protection of sensors against overloading and high comfort in the treatment of the measured data are. This results in less work with the measurement evaluation and extends the number of applications.

The device is operated through a membrane keyboard from which the input parameters are inserted (i.e. fuel type, output format selection). All the results are displayed on a 4-row-LCD-display and stored in adjustable intervals into the internal memory. After the measurement the device can be connected to a PC and by means of a special software the stored data can be downloaded, statistically processed and printed in a form of a protocol. The analyser can also be run "on line" with a PC or notebook in order to see the time development of the measured values. This is practical especially when adjusting burners. In this on-line operation the time dependencies of the concentrations are displayed on the monitor together with the analogue and digital Any of these display segments can be magnified or whole monitor or graphs plus "dials" etc.). It is possible to change the number of graphs and choose the shown time section. The analyser is delivered in plastic housing, the portable one in an Alu-case with technical properties of both versions are the same. requires only the well-timed exchange of the service life of the sensors is 2 years.



displays and the table of the measured values. deleted (e.g. have only the graphs expanded on the monitor or graphs plus "dials" etc.). It is possible to change the number of graphs and choose the shown time section. The analyser is delivered in plastic housing, the portable one in an Alu-case with technical properties of both versions are the same. requires only the well-timed exchange of the service life of the sensors is 2 years.



use

The device is used mainly for emission measurements, optimization and checking of the combustion process in applications of all fuel types. It can also be used to determine the individual components. In case that interfering gases are present consulting the manufacturer is required.

The device is not equipped for long-term measurements. In such a case it is necessary to carry out some preliminary treatment of the analysed gas (drying, filtration etc.)



technical description

Measured value	Sensor type	Unit	Resolution
Oxygen	Electrochemical sensor	% vol.	0,1 %
Carbon monoxide	Electrochemical sensor	ppm, mg/m3, mg/m3(O2)	1 ppm
Carbon dioxide	Computation	% vol.	0,1 %
Nitric oxide	Electrochemical sensor	ppm, mg/m3, mg/m3(O2)	1 ppm
Sulphur dioxide ***	Electrochemical sensor	ppm, mg/m3, mg/m3(O2)	1 ppm
Flue-gas temperature	Thermocouple Ni-NiCr	°C	1 °C
Stack draught	Semiconductor sensor	Pa	1 Pa
Air excess	Computation	-	
Combustion efficiency	Computation	%	

Printer	built in, pin-type, 24 char./row
Bypass	SW adjustable for particular components
Serial port	RS232, 9 pin CANNON
Internal memory	128 kByte
Power supply	230 V / 50 Hz
Working time with the accumulator	2 hours
Accumulator	12 V / 1,2 Ah
Length of the probe	750 mm +
Material of the probe	stainless steel
Lenth of the connecting hose	3000 mm +
Material of the connecting hose	butyl rubber
Protection	IP 42
Operation temperature	+10 .. + 40 °C
Size (mm)	200 x 200 x 260
Weight	6 kg
* depends on the fuel ** change of range on request *** alternatively NO2 or H2S + extendable on request	