

- multi-channel measuring bench for up to 6 gases
- electro chemical cells connectable
- temperature and pressure compensation, reference channel for maximum precision
- location-independent operation
- no moving parts for zero abrasion and wear

## NDIR 8000

## THE NDIR SENSOR MODULE - OEM PRODUCT

Based on the principle of NDIR, the NDIR 8000 provides the highest flexibility and tailor-made solutions for your Application. Since each sensor is fully developed and produced in our company, we provide customer specific adaptations for your products. Every single detector undergoes a strict quality process, which includes a 4-week aging and testing phase. Then you will receive a fully calibrated detector, which is ready to use. The absence of moving parts guarantees a minimum of maintenance and a long lifetime. Measurement values can be taken either via an integrated RS232 interface or via the analogue output.

## PRODUCT DETAILS

	min. range	max. range
CO	0 - 5.000 vppm	0 - 50 Vol.-%
CO <sub>2</sub>	0 - 100 vppm	0 - 100 Vol.-%
CH <sub>4</sub>	0 - 5 Vol.-%	0 - 100 Vol.-%
C <sub>3</sub> H <sub>8</sub>	0 - 10.000 vppm	0 - 50 Vol.-%
SO <sub>2</sub>		0 - 2.000 vppm
NO		0 - 5.000 vppm
H <sub>2</sub> O		0 - 100 Vol.-% rel.
O <sub>2</sub> (el.chem)		0 - 25 Vol.-%
NO (el.chem)		0 - 5.000 vppm

More gases and ranges are possible on request.

### TOC-Version

Several CO<sub>2</sub> measuring ranges will be combined with automatic measuring range switching. Special calibration promises a very good linearity behavior ( $\pm 1\%$  of the MR) and high accuracies ( $\pm 1,5\%$  of the MR). Latency times of 250 ms can be implemented.

### Automotive-Version

With the moisture-independent measurement of NO and the additional channels for CO, CO<sub>2</sub> and HC you will have a compact, reliable detector for measuring automotive exhaust gases. This OEM product can be easily implemented in your gas analyser.



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# SPECIFICATIONS

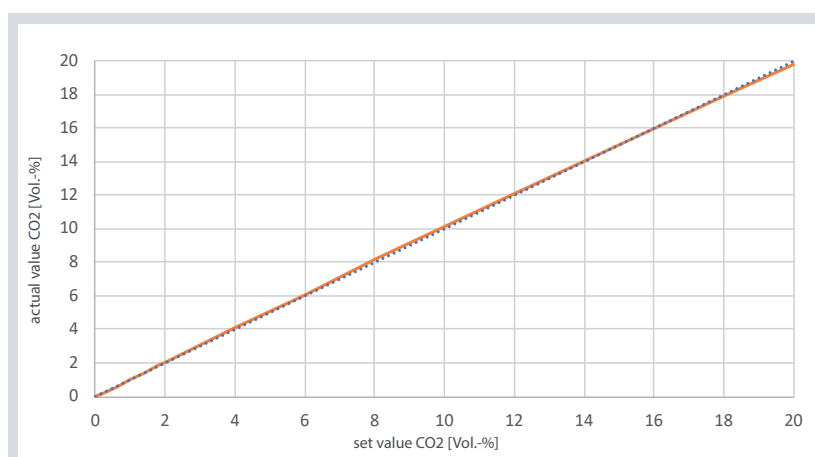
## Technical data

measuring principle	non-dispersive infrared (NDIR)
max. NDIR channels	6
digital resolution	1 ppm
linearity	$\pm 0.1$ % of MR
accuracy	$\pm 2.0$ % of MR
zero point drift	$\pm 2.0$ % of MR / 24 h
sensitivity drift	$\pm 2.0$ % of MR / week
pressure influence	$\pm 0.1$ % of MR / hPa
temp. influence	$\pm 0.1$ % of MR / K
ripple	$\pm 0.1$ % of MR
response time	T90 < 4 s

warm-up time	20 s quick start < 10 min full specification
dimensions	320 x 111 x 60 mm (LxWxH)
mass	0.8 kg
power supply	+ 15 V DC ... 25 V DC 150 mA @ 24 V DC
communication	RS232
analog output	0 ... 24 mA 4 ... 24 mA
operating temp.	5 ... 45 °C
operating pressure	760 ... 1160 hPa
gas flow	20 ... 100 l/h max. flow difference $\pm 2$ l/h
permissible gas pressure	20 ... 200 hPa gauge pressure

## Optional features

- power supply
- gas pump
- different hose connections
- software
- water trap



### Linearity of NDIR8000 V172

Measuring ranges:

- CO2 0 - 1,000 vppm
- CO2 0 - 20,000 vppm
- CO2 0 - 20 Vol.-%
- dynamic range switching

$$R^2=0.9998$$

The SAXON Junkalor GmbH is a privately owned high tech enterprise that has been establishing a broad experience in metrology and gas analysis for many years. Over the last century, our company has emerged as a market leader for gas emission measuring instruments with professional knowledge in the physical field, starting right from the measurement sensor through to the complete analyser.

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