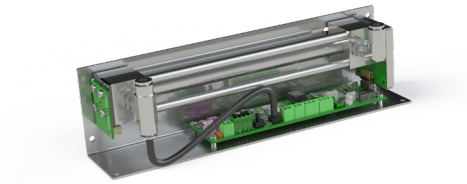
KNESTEL TECHNOLOGIE & ELEKTRONIK

we invent solutions

OEM-NDIR$_{flex}$
Non dispersive InfraRed Sensor



for Automotive, Gas analysis

Technology fields

MSR technology, gas analysis, optical measurement technology

Project requirements

The **project objective** was the development of a NDIR$_{flex}$ measuring bench with modular design for different Cell lengths. The measured values should be transmitted via a CAN or serial RS232 communication protocol can be called up. Furthermore a heatable cuvette and a Peltier cooling of the thermopile receiver should be realized. Via a further measuring input an additional electrochemical O_2-sensor can be evaluated. A further requirement was the determination of the flow rate of the gas to be measured and a pressure or temperature compensation of the measured values.

Facts/Highlights

- Evaluation of up to four thermopile channels
- No moving components (filter wheels, chopper or similar)
- Temperature-, pressure- and H_2O-compensation
- CAN and RS232 interface
- Measurement input for electrochemical O_2 sensor
- High cost efficiency

Services of KNESTEL

Potential analysis, target price estimation, project management, specifications, project planning, development of software and hardware, electrical and mechanical design, EMC test, prototyping, series production

Possible applications

- Emission and immission measurements of industrial and process gases
- Determination of pollutant concentrations in the air
- Maturity monitoring of fruit and vegetables
- Emission measurements
- Water analysis (TOC measurement)

Our projects in the field of gas analytics are constantly evolving.
You can find the latest information at www.trace-gas.com

About KNESTEL: Knestel has been developing and producing customized electronic and mechatronic special solutions in the fields of motor and machine control, frequency converters, image processing, MCR technology, software development, radio, bus systems and gas analysis for 40 years.
We support our customers from the idea to the finished implementation. Individual solutions and concepts - technically up to date. Our production - electronics manufacturing, device and switch cabinet construction, Production of subassemblies, assembly and mechanical processing - is equipped with the latest technology.

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