

# GOND-40

## MEODAT

Meßtechnik, Ortung und Datenverarbeitung

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### GOND-40 Gas & Oil Noise Detection and Classification System

The GOND-40 is able to cost-effectively register and classify noises and vibrations in real-time. This capability makes it ideally suited for machine and plant automation in control monitoring systems (CMS) as well as for more general noise analysis including quality control.

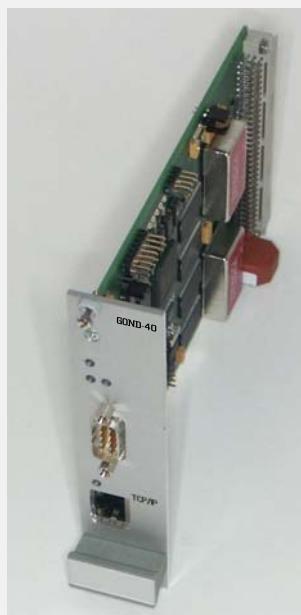
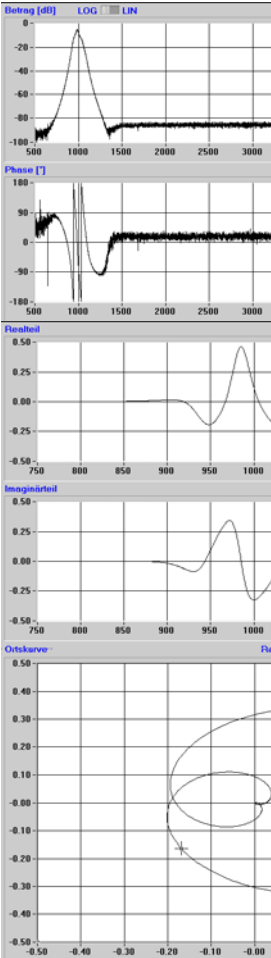
The GOND-40 registers noises or vibrations with suitable sensors such as microphone, radar or mechanical vibration. The noises or vibrations are processed in the main unit and the real-time result is provided as output which may be directly fed to the plant or machine control system(s).

The main unit contains a high performance digital signal processor (DSP) which controls and classifies the sensor measurements in very short measurement and analysis cycles.

A PC is used to programme and collect protocols from GOND-40s but is not required for operation. This makes the GOND small, robust, powerful and reliable. The GOND-40 has been designed to be universally applied to specific application measurement requirements through a short noise or vibration learning phase.

Application areas include:

- Automation of machine or plant maintenance planning and decisions e.g. replacement of worn parts, co-ordination of plant operation
- Quality control of components expected to provide a particular noise
- Customisation of devices for the deaf or hard of hearing
- Analysis of dopplar radar signals



#### Analogue technology:

Connectors: BNC or LEMO  
Input voltage: 5 mV - 60 mV (microphone)  
100 mV - 10 V (Standard)  
Input Amplification: 0...22.5 dB (programmable)  
Input Frequency range: 20 Hz...40 kHz  
Output Voltage: 10 mV ..2,5 V (programmable)  
Output Bandwidth: 20 Hz... 20 kHz  
Dynamic: 80 dB

#### AD/DA Converter:

Type: Delta Sigma Converter  
Resolution: 16 Bit  
Sampling rate: 345 Hz ... 102.4 kHz  
Calibration: self-calibration and software

#### Digital technology:

Signal processor: TMS320C33, 120 MHz  
Memory: 34K x 32-Bit SRAM, 512 kByte Flash-ROM  
Interface: RS232, max. 1 Mbaud

#### Power supply:

Voltage: 12 V or 24 V DC

#### Housing:

Class: IP-40 ... IP64 (DIN 40050/IEC 529)  
19" System 3HE, 6TE  
Dimensions: 150mm x 32mm x 106mm  
Mass: ca. 600g