

# IMPSPEC

## MEODAT

Meßtechnik, Ortung und Datenverarbeitung

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### IMPSPEC a robust and compact impedance spectrometer

Impedance spectroscopy is a relatively simple and non-destructive method for the investigation of biological and non-biological objects.

The measuring system **IMPSPEC** is designed for industrial applications and consists of an assortment of measuring sensors (Applicators) and a compact and modular processing unit.

**IMPSPEC** requires no PC for operation and is therefore very secure against disturbance and failure. A PC is easily connected via an USB interface to set measurement parameters and for service work as well as for data logging.

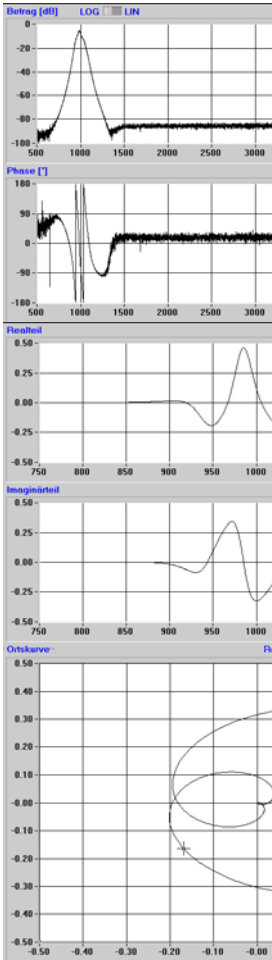
**IMPSPEC** uses modern multi-sine procedures for fast and precise measurements.

**IMPSPEC** calibrates itself automatically and thereby achieves high channel symmetry better than 0,01dB / 0,02°.

**IMPSPEC** is offered in two frequency range versions:  
IMPSPEC LF works from 10 Hz to 21.6 kHz and  
IMPSPEC HF works from 20 kHz to 10 MHz.

**IMPSPEC** adapts its measuring signals to an optimal for each individual measurement task achieving high measurement accuracy with short gate times.

The **IMPSPEC** service software possesses efficient and clear diagrams of absolute value and phase, real and imaginary parts as well as locus diagrams.



#### Analogue inputs:

2 Connectors, SE or differential,  
Jacks: LEMO, Binder or  
Phoenix-Contact-screw-clamps,  
Input impedance: 50 Ohm,  
Voltage range: 1 Vpp  
ADC resolution: 2 x 12 Bit

#### Analogue output:

1 Connector, SE or differential,  
Jacks: LEMO, Binder or  
Phoenix-Contact-screw-clamps,  
Output impedance: 50 Ohm,  
Max. output voltage: 1.6 Vpp  
DAC resolution: 14 Bit  
Signal forms: Sine, Multi-Sine,  
Chirp  
Frequency range: 10 Hz ... 10 MHz

#### Power supply:

+/- 12V DC, 6 W

#### Interface: USB 1.1