

# A100-1 set

Optical Fiber Probe 1-channel, 25 kHz



## Short description

The A100-1 set is used for oscillating analog signals under EFT/ESD/RF interference. The set is particularly suitable for the measurement of analog signals when testing the immunity of electrical or electronic devices (equipment) against high-frequency electromagnetic fields (IEC 61000-4-3 to IEC 61000-4-6). This system is suitable for signal control in an anechoic chamber or EMC-compliant space. The set consists of a sensor which measures an analog signal within the device under test and transforms it into optical signals. The optical signals are transmitted via a fiber optical cable to the optical receiver which then transforms them into electrical signals. Those can be seen with an oscilloscope or can be used for controlling other devices. For signal detecting within the device under test several sensor types AS 100, AS 110 or AS 120 with different measuring ranges are available.

The signal influence of the prescribed modulation models for electromagnetic fields can be easily detected using the A100 set, A200 set and A300 set analog measuring systems. Hard- and software can be EMC-optimized, because disturbed signals can be easily detected.

## Scope of delivery

- 1x AE 100, Optical Receiver
- 1x AS 100, Optical Sensor (50 / 10) V DC
- 1x LWL Ø 2.2 mm 1.5 m, Optical Fiber Single 1.5 m
- 1x NT FRI EU, Power Supply Unit
- 1x A100-1 acc, Accessories
- 1x A100-1 case, System Case
- 1x Analog m, User Manual

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## Technical parameters

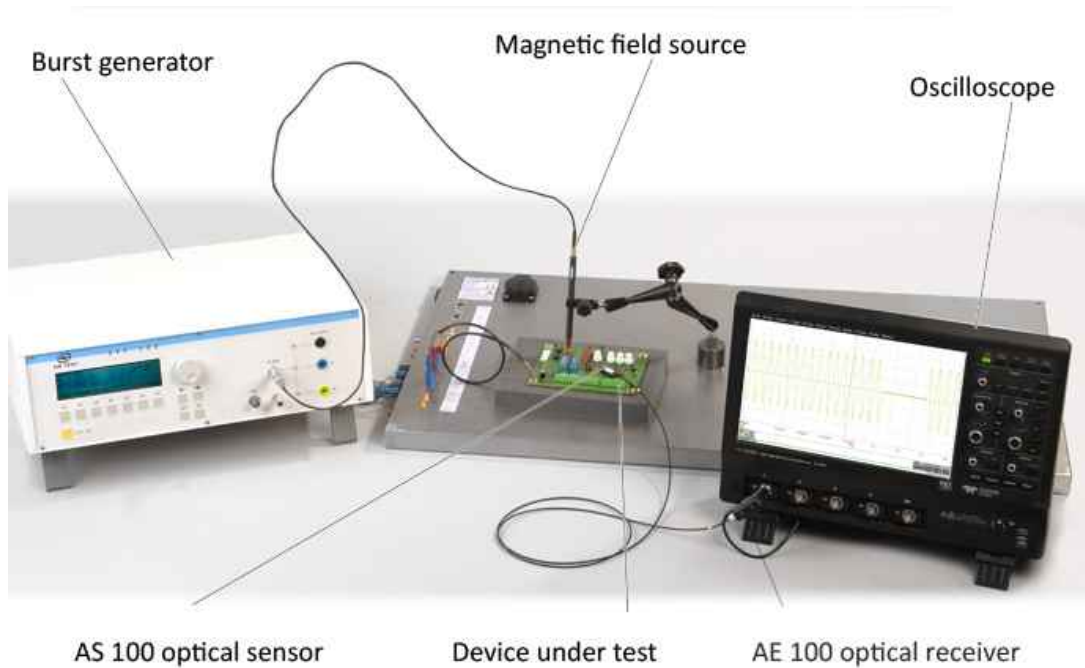
<b>Bandwidth</b>	DC ... 25 kHz
<b>Sampling rate</b>	125 kbps
<b>Resolution</b>	12 Bit
<b>AE 100 Optical Receiver</b>	
Bandwidth	DC ... 25 kHz
Optical input: Optical fiber	Ø 2.2 mm
Voltage range - output	0 V ... 10 V
Supply voltage	12 V ... 16 V
Current input	≈ 30 mA
Connector - output	BNC
<b>AS 100 Optical Sensor</b>	
Bandwidth	DC ... 25 kHz
Sampling rate	125 ksps
Measuring range	0 V ... 50 V / 0 V ... 10 V DC (switchable)
Input resistance	100 kΩ
Radiated immunity	> 200 V/m
Supply voltage	3 V ... 16 V
Current input	≈ 3 mA
<b>Optical fibre length</b>	1 m ... 20 m

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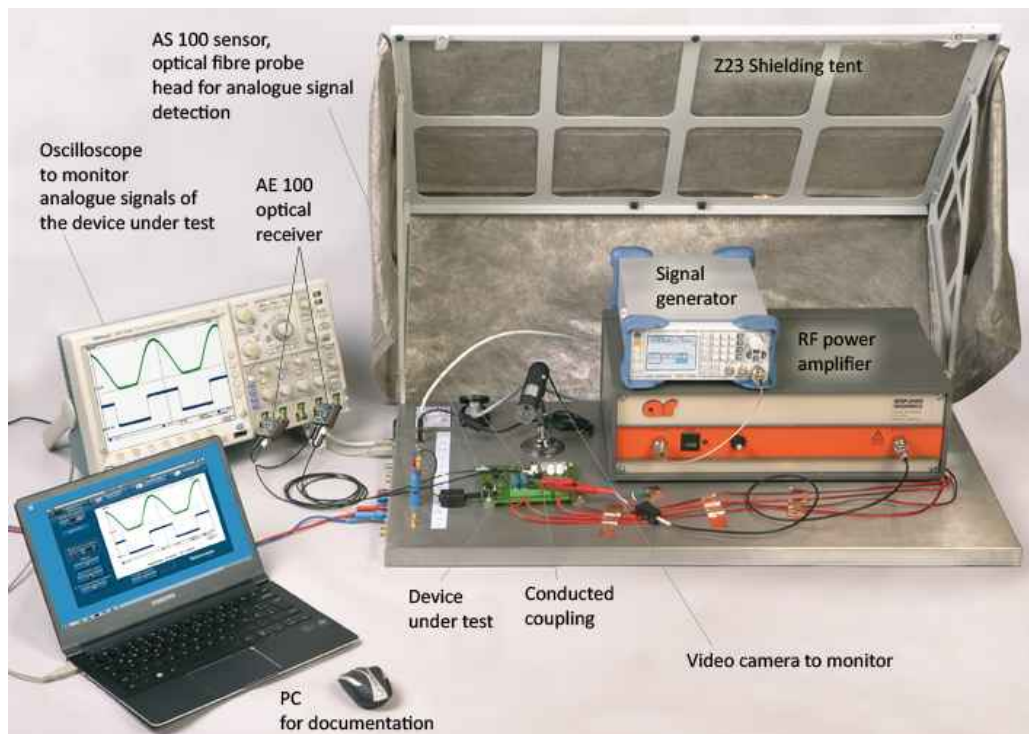
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## Application with Set A100 and field source



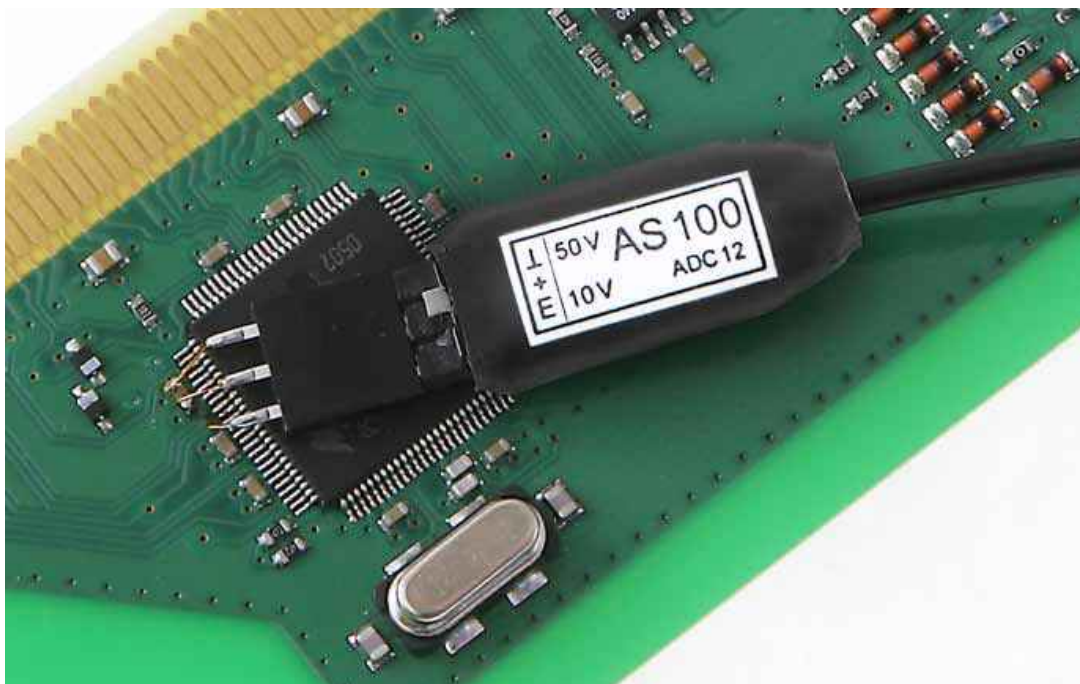
## Application Set A100 and shielding tent



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Application with optical sensor AS 100



Scope of delivery Set A100-1

