



# **EMC EMI probe set sniffer DC to 6GHz**

High performance sniffer-set for use with any Spectrum Analyzer or Oscilloscope

### Included with delivery:

- 1 x 50mm magnetic field probe
- 1 x 25mm magnetic field probe
- 1 x 12mm magnetic field probe
- 1 x 6mm magnetic field probe
- 1 x directional E-field probe
- Pre-amplifier with power supply & battery (only PBS2)
- 1m SMB-to-SMA Cable
- Pistol grip with tripod function
- Transport case with paddings
- Exhaustive manual

## **Specifications:**

#### PBS1 & PBS2 Sniffer Set:

Frequency range: DC-6GHz

Pre-Amplifier noise (PBS2): 3.5dB typical

PreAmplifier type/gain (PBS2): "linear" falloff. 1MHz: 40dB; 3GHz: 37.5dB; 6GHz: 35dB

Dimensions of case (L/W/D): (300x190x70) mm

Weight PBS1 (case incl. probes): 1200gr

Weight PBS2 (case incl. probes and pre-amplifier): 1500gr

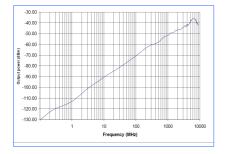
Warranty: 10 years

#### **Directional E-field probe:**

Sensor diameter: 3mm

Maximum resonance frequency: >3GHz
Connector: 50 Ohms SMB socket (m)

Warranty: 10 years



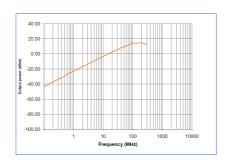
#### 50mm magnetic field probe:

Sensor diameter: 50mm

Maximum resonance frequency: 700MHz

Connector: 50 Ohms SMB socket (m)

Warranty: 10 years



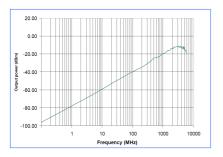
#### 6mm magnetic field probe:

Sensor diameter: 6mm

Maximum resonance frequency: >6GHz

Connector: 50 Ohms SMB socket (m)

Warranty: 10 years



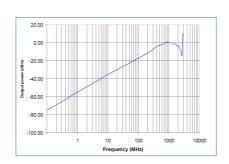
#### 12mm magnetic field sniffer:

Sensor diameter: 12mm

Maximum resonance frequency: 2,6GHz

Connector: 50 Ohms SMB socket (m)

Warranty: 10 years



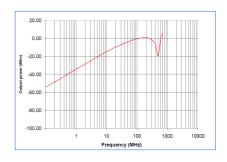
#### 25mm magnetic field probe:

Sensor diameter: 25mm

Maximum resonance frequency: 500MHz

Connector: 50 Ohms SMB socket (m)

Warranty: 10 years



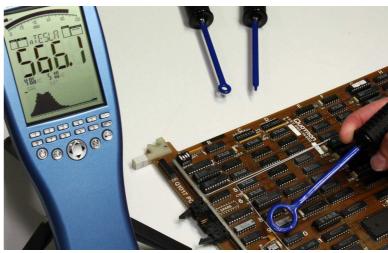
Included in delivery is a transport case with paddings for the 5 probes and for the pre-amplifier with power supply (only included at the PBS2). Each probe-set also contains an exhaustive english manual, a 1m SMB-to-SMA cable and a pistol grip with miniature tripod function.

### **Details**

Our EMC probe set allows for straightforward pinpointing and measurement of interference sources in electronic component groups as well as execution and monitoring of generic EMC measurement. Our probe set is especially suitable for:

- Pinpointing interference sources
- Estimation of interference field strength
- Verification of shielding and filtering measures
- Identifying faulty components
- Detecting circuitry overly sensitive to interference

Our set includes a total of 5 probes: 4 probes for magnetic field measurement and one for measurement of electric fields. All probes are covered with an insulating layer, thus allowing safe measurement of oscillators or mains lines.



Magnetic field measurement on a group of components using the H-field probe



Pinpointing interference sources on a circuit board



Use of the included tripod for the fixation of the H-field probe

The PBS2 probe set additionally contains a high-performance pre-amplifier, allowing measurement of significantly weaker interference sources, boosting the sensitivity of our instruments by up to 40dB.

All probes have deliberately been implemented as passive devices to make them usable as transmitting devices as well. Consequently, components and circuits sensitive to interference can easily be pinpointed.

**Perfect for locating interference sources** which might have been found e.g. in an EN55011, EN55022 or EN50371 (Class A or Class B) survey. After implementing appropriate changes in the circuit, their efficiency can easily and reliably be verified. That way, expensive and time-consuming re-assessments in an EMC laboratory can be skipped.

**Verification of official EMC limits**: For example, should an interference source exceed an official EMC limit by 10dB, our probe set can easily verify if a certain countermeasure succeeds in making the circuitry conforming again.

This is another situation where the probe sets can eliminate the need for expensive and time-consuming measurements in EMC laboratories.

Very usefull is the integrated (1/4") tripod connector which allows to mount the probes on each tripod.

Our EMC Probe Set can be connected to any Spectrum Analyzer or Oscilloscope. For units with N-connector we offer a SMA-to-N Adapter (optional).



Each Probe offers a SMB-quick-connector...



... which allows a fast connection/change of the included measurement cable.



The tripod connector at the bottomside of each probe allows the comfortable fixation using the included miniature tripod