# SX1 set Near-Field Probes 1 GHz up to 10 GHz





## Short description

The SX1 set consists of three passive near-field probes for measuring E-fields and magnetic fields with a high clock frequency from 1 GHz to 10 GHz on electronic assemblies and ICs during the development stage. The different probe heads of the SX1 set allow for measurements very close to the electronic assemblies, e.g. on single IC pins, conducting paths, components, and connectors, in order to localize interference sources. An electronic assembly's field orientation and field distribution can be detected through specific use of the near-field probe. The near-field probes are small and handy. They have a current attenuating sheath and are electrically shielded. They can be connected to a spectrum analyzer or an oscilloscope with a 50  $\Omega$  input.

High clock rates, e.g. above 3 GHz approach 10 GHz already at the 3rd harmonic. These harmonics are decoupled from RF sources on the board, e.g. conductor sections, ICs and other components. Other structural parts of the assembly can be excited to oscillate and lead to interference emission. With the high internal base frequency of today's assemblies, the measurement of harmonic frequency multiples is an important step towards an EMC-compliant assembly.

### Scope of delivery

- 1x SX-E 03, E-Field Probe 1 GHz up to 10 GHz
- 1x SX-B 3-1, H-Field Probe 1 GHz up to 10 GHz
- 1x SX-R 3-1, H-Field Probe 1 GHz up to 10 GHz
- 1x SMA-SMA 1 m es, SMA-SMA Shielded Measurement Cable
- 1x Case 4, System Case Near-Field Probes for 4 probes

#### Technical parameters

Frequency range	1 GHz - 10 GHz
Connector	SMA, female, jack
Weight	200 g

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### Measurement set-up near-field probes



Application SX-R 3-1



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