

# **SRF5030 Near Field Probe**

## **User Manual**


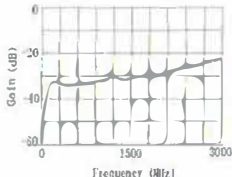

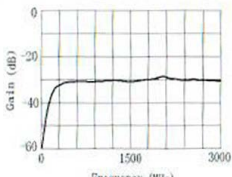

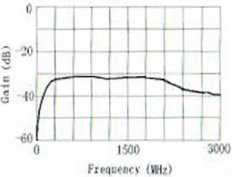



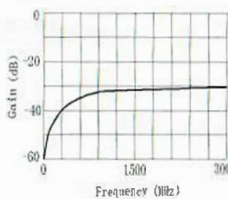
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## Summary

The near field probe type SRF5030 set contains magnetic field probes for precompliance tests of printed circuit boards. Measuring the magnetic fields in the area of the module, conducting tracks, components and the modules of the supply system is the basis for selective measures to reduce disturbance emissions. The passive near field probes are connected to the 50 Ohm input of a spectrum analyzer or oscilloscope and allow comparative measurements of magnetic fields and disturbance currents in the frequency range from 30 MHz up to 3 GHz.

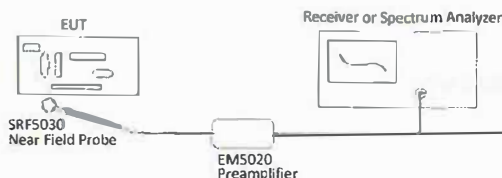
## Nominal and Typical Characteristics

Model	Description	Characteristic
 <b>SRF5030-1</b>	<p>It can be used at a distance of up to 10 cm from the units. The probe detects the spatial distribution of HF magnetic fields in devices and assemblies and allows the user to draw conclusions with regard to disturbance emissions.</p> <p>Frequency range: 30MHz to 3GHz.</p>	 <p>Gain (dB)</p> <p>Frequency (MHz)</p>
 <b>SRF5030-2</b>	<p>It is suitable for measurements up to 3 cm. Interference sources can be localised by detecting the distribution and orientation of the field, therefore enabling a more exact use of higher resolution probes.</p> <p>Frequency range: 30MHz to 3GHz</p>	 <p>Gain (dB)</p> <p>Frequency (MHz)</p>
 <b>SRF5030-3</b>	<p>It detects the current which generates the field via the magnetic field circulating around a single conductor or conductor bundle. It is used for very wide conductor runs (Resolution approx. 5 mm).</p> <p>Frequency range: 30MHz to 3GHz</p>	 <p>Gain (dB)</p> <p>Frequency (MHz)</p>

 <p>SRF5030-4</p>	<p>It is designed for the detection of magnetic fields which are emitted vertically from the surface of PCBs and is thus ideal for investigating current loops. The probe allows the measurement in confined board areas (between large controller components, for example - resolution approx. 2 mm). Frequency range: 30MHz to 3GHz</p>	 <p>The graph shows Gain (dB) on the y-axis (0 to -60) and Frequency (MHz) on the x-axis (0 to 3000). The curve starts at -60 dB at 0 MHz and rises to approximately -30 dB at 3000 MHz.</p>
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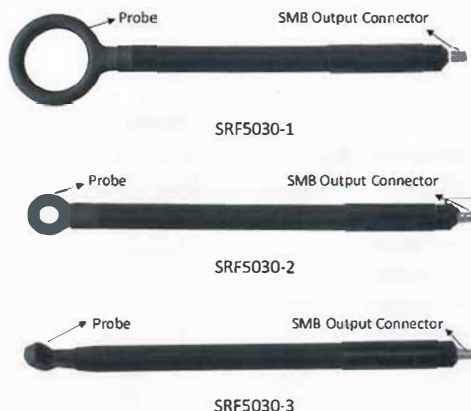
## Application

- Disturbance emissions localization
- Magnetic field intensity detection



## Products and Accessories

### Products Description





SRF5030-4

## Accessories



Standard Cable: SMB-SMA



Standard Connector: SMA (female) to N (male)

## Contact SIGLENT

### SIGLENT TECHNOLOGIES CO., LTD

Address: 3/F, Building 4, Antongda Industrial Zone, Liuxian Road,  
68 District, Baoan District, Shenzhen, P.R. CHINA

Service Tel: 0086 755 3661-5186

Post Code: 518101

E-mail: [sales@siglent.com](mailto:sales@siglent.com)

<http://www.siglent.com>

## List of goods

Name	Quantity
H-Field Probe SRF5030-1	1
H-Field Probe SRF5030-2	1
H-Field Probe SRF5030-3	1
H-Field Probe SRF5030-4	1
SMB-SMA Cable	1
SMA (female) to N (male)	1
User Manual	1
Warranty Card	1