

# Near field probes for Tektronix EMC pre-compliance

## EMI-NF-PROBE (TEKBOX TBPS01 offered by Tektronix)



### Key features

- Slim design for good access in between tightly spaced components
- Shielded loops to avoid picking up common mode noise; insensitive to the human hand
- Frequency range up to 6 GHz
- Insulated with rubber coating

### Applications

- Radiated EMC measurement
- RF immunity testing
- Contactless (load free) relative measurement of RF signal chains
- Contactless (load free) relative measurement of oscillators, modulators, etc.

The EMI-NF-PROBE is the TEKBOX TBPS01. This set of magnetic field and electric field probes is for radiated emissions EMC pre-compliance measurements. The probes are used in the near field of sources of electromagnetic radiation and serve to locate and identify potential sources of interference within the building blocks of electronic assemblies. The probes act similar to wide bandwidth antennas, picking up radiated emissions from components, PCB traces, housing openings or gaps, and from any other parts that could be emitting RF. The probes are usually connected to a spectrum analyzer.

Specifications

Near field probes

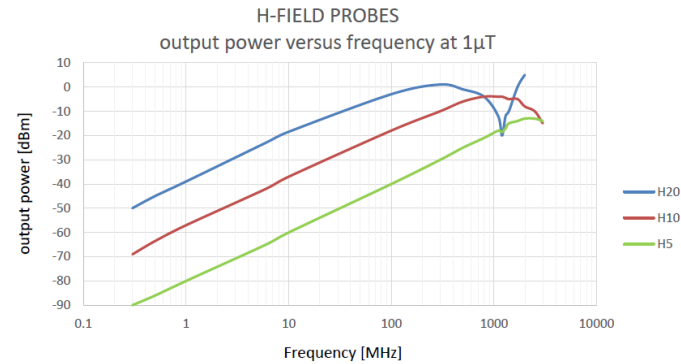
Frequency range

1 MHz –1 GHz

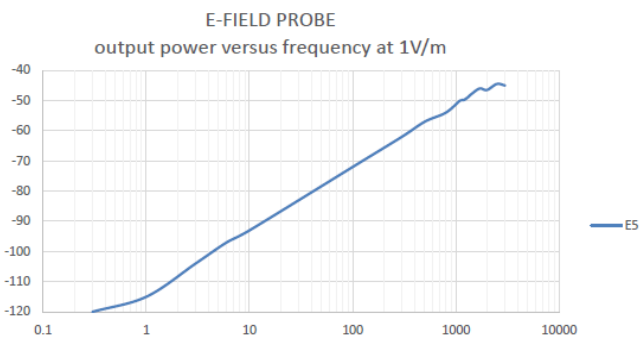
Dimensions

| Probe                  | Length | Loop  | Tip  |
|------------------------|--------|-------|------|
| H20 H-Field (magnetic) | 170 mm | 20 mm | N.A. |
| H10 H-Field (magnetic) | 170 mm | 10 mm | N.A. |
| H5 E-Field (electric)  | 170 mm | 5 mm  | N.A. |
| E5 E-Field (electric)  | 170 mm | N.A.  | 5 mm |

Frequency response  
(magnetic field probes)



Frequency response (electric  
field probes)



## Ordering information

### EMI-NF-PROBE and related accessories

| Item         | Description                                                                             |
|--------------|-----------------------------------------------------------------------------------------|
| EMI-NF-PROBE | EMC probe set consisting of H20, H10, H5, E5, 75 cm SMB to SMA cable, measurement plots |
| EMI-NF-AMP   | 20 dB wideband amplifier with cable                                                     |

### Service

All service provided by TEKBOX Digital Solutions. Contact <https://www.tekbox.net/> for product information and service.

### DS\_CertificationsContainer

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**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tek.com](http://www.tek.com).

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