

**HZ540/HZ550 EMI Near-Field Probe Set up to 3GHz**

HZ550



Picture  
HZ550L

**HZ540 and HZ550 EMI-Near Field Probe Sets**

The HZ540/550 are the ideal toolkits for the investigation of RF electromagnetic fields. They are indispensable for EMI pre-compliance testing during product development, prior to third party testing. The sets include 3 or 5 hand-held probes with built-in pre-amplifier covering the frequency range from <1MHz to approx. 3.000MHz.

The probes of the basic set HZ540 include one magnetic field probe, one electric field probe, and a high impedance probe. In addition to the HZ550 features an optional  $\mu$ -magnetic field probe and an antenna. All probe outputs are matched to the 50 $\Omega$  inputs of spectrum analyzers or RF-receivers.

**Probe Set HZ540 (Basic Set)**

<b>HZ551</b>	<b>Electrical Field Probe</b>
Frequency range:	<1MHz to approx. 3GHz
Directional sensitivity:	omnidirectional Sensitive to electrical fields
Output impedance:	50 $\Omega$ ; SMA-connector
Power supply:	6V <sub>dc</sub> /80mA (directly from HAMEG Spectrum Analyzer)

<b>HZ552</b>	<b>Magnetic Field Probe</b>
Frequency range:	<30MHz to approx. 3GHz
Directional sensitivity:	similar to frame antenna Sensitive to changing magnetic fields
Output impedance:	50 $\Omega$ ; SMA-connector
Power supply:	6V <sub>dc</sub> /50mA (directly from HAMEG Spectrum Analyzer)

<b>HZ553</b>	<b>High Impedance Probe</b>
Frequency range:	<1MHz to approx. 3GHz
Input capacity:	<2pF    approx. 250k $\Omega$
Attenuation:	between 10:1 and 30:1
Max. input voltage:	10V <sub>pp</sub> (without significant distortion)
Max. voltage of a non-insulated conductor:	30V
Output impedance:	50 $\Omega$ ; SMA-connector
Power supply:	6V <sub>dc</sub> /80mA (directly from HAMEG Spectrum Analyzer)

**Physical dimensions:** 13 x 27 x 70mm (W x H x D)  
(+ antenna of HZ551)

**HZ540 consists of:**  
HZ551 Electrical Field Probe  
HZ552 Magnetic Field Probe  
HZ553 High Impedance Probe  
1 SMA to N-Cable 1.2m  
Case  
Manual

**Probe Set HZ550**

<b>HZ554</b>	<b>Magnetic Field Probe (small sensor)</b>
Frequency range:	<50MHz to approx. 3GHz
Directional sensitivity:	Sensitive to changing magnetic fields High spatial resolution due to very small sensor area
Max. voltage of a non-insulated conductor:	30V
Output impedance:	50 $\Omega$ ; SMA-connector
Power supply:	6V <sub>dc</sub> /50mA

<b>HZ556</b>	<b>Active antenna</b>
Frequency range:	<30MHz to approx. 3GHz
Directional pattern:	similar to frame antenna Radiation of changing magnetic fields
Max. input power:	0.5W (short term)
Output impedance:	50 $\Omega$ ; SMA-connector
Power supply:	not required, passive probe

**Physical dimensions:** 13 x 27 x 70mm (W x H x D)  
(+ antenna of HZ551)

**HZ550 consists of:**  
1 HZ540 Basic Set  
1 HZ554 Magnetic Field Probe  
1 HZ556 Active antenna  
1 SMA to N-Cable 1.2m

**Probe Set HZ540L and HZ550L**

HZ540L = HZ540 (without HZ553) + HZ555 Low Capacitance Probe  
HZ550L = HZ550 (without HZ553) + HZ555 Low Capacitance Probe

<b>HZ555</b>	<b>Low Capacitance Probe</b>
Frequency range:	approx. 400kHz...3GHz
Input impedance:	<0.2pF // 250k $\Omega$
Attenuation:	10:1
Max. input voltage:	5V <sub>pp</sub>
Max. voltage of a non-insulated conductor:	30V
Output impedance:	50 $\Omega$ ; SMA-connector
Power supply:	6V <sub>dc</sub> /80mA