

EMV Near-Field Probe Set up to 3 GHz

HZ540/550



Image
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 resp. 5 hand-held probes with built-in pre-amplifier covering the frequency range from $< 1\text{MHz}$ to approx. 3000MHz .

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 μ -magnetic field probe and a passive radiation probe. All probe outputs are matched to the 50Ω inputs of spectrum analyzers or RF-receivers.

Probe set HZ540 (Basic set)

HZ551	Electrical Field Probe
Frequency range:	<1 MHz to approx. 3GHz
Directional sensitivity:	omnidirectional Sensitive to electrical fields
Output impedance:	50Ω; SMA-connector
Power supply:	6VDC/80 mA (directly by HAMEG Spectrum Analyzer)

HZ552	Magnetic Field Probe
Frequency range:	<30MHz to approx. 3GHz
Directional sensitivity:	similar to frame antenna Sensitive to changing magnetic fields
Output impedance:	50Ω; SMA-connector
Power supply:	6VDC/50mA (directly by HAMEG Spectrum Analyzer)

HZ553	High Impedance Probe
Frequency range:	<1 MHz to approx. 3GHz
Input capacity:	<2pF // approx. 250kΩ
Attenuation:	between 10:1 and 30:1
Max. input voltage:	10V _{pp} [without significant distortion]
Max. voltage of an unisulated conductor:	30V
Output impedance:	50Ω; SMA-connector
Power supply:	6VDC/80mA (directly by HAMEG Spectrum Analyzer)

Physical dimensions:	(H x W x L): 13 x 27 x 70 mm (+ antenna at HZ551)
HZ540 consists of:	HZ551 Electrical Field Probe HZ552 Magnetic Field Probe HZ553 High Impedance Probe 1 SMA to N-Cable 1.2 m Case Manual

Probe set HZ550

HZ554	Magnetic Field Probe (small sensor)
Frequency range:	<50 MHz to approx. 3 GHz
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 Ω; SMA-connector
Power supply:	6 VDC/50 mA

HZ556	Radiation Probe
Frequency range:	<30MHz to approx. 3GHz
Directional sensitivity:	like frame antenna Radiation of changing magnetic fields
Max. input power:	0.5 W (short term)
Output impedance:	50 Ω; SMA-connector
Power supply:	not required; passive probe

Physical dimensions:	(H x W x L): 13 x 27 x 70 mm (+ antenna at HZ551)
HZ550 consists of:	1 HZ540 basic set 1 HZ554 Magnetic Field Probe 1 HZ556 Radiation Probe

Probe set HZ540L and HZ550L

HZ540L = HZ540 (ohne HZ553) + HZ555 Niedrig-Kapazitive-Sonde
 HZ550L = HZ550 (ohne HZ553) + HZ555 Niedrig-Kapazitive-Sonde

HZ555	Niedrig-Kapazitive-Sonde
Frequenzbereich:	ca. 250 kHz bis 3 GHz
Eingangskapazität:	< 0,2 pF // ca. 250 kΩ
Teilungsverhältnis:	10:1
Max. Eingangsspannung:	5 V _{ss}
Max. Spannung eines unisolierten Leiters:	30 V
Ausgangsimpedanz:	50 Ω; SMA-Anschluss
Spannungsversorgung:	6 V, 80 mA

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