# HZ540 / HZ550 Nearfield probe set Technical Data





### **Key facts**

- Locating radiated emission sources
- Localisation of EMI sensitive devices
- Checks on shielding effectiveness
- Diagnosis of radiated signals
- Identification of radiating components
- I Nearfield probe set HZ540 consits of probes HZ551, HZ552, HZ553 (Basic Set)
- $\scriptstyle\rm I$  Nearfield probe set HZ550 consits of the Basic Set and the probes HZ554, HZ556





Test & Measurement

## **Technical Data**

Nearfield Probe Set					
HIZE 40(L) (HIZEEO(L)					
HZ540(L) / HZ550(L)					
Valid at 23°C after a 30 minutes warm	n-up period				
HZ551 Electric Field Probe					
Frequency range:	1 MHz to approx. 3 GHz				
Directional sensitivity:	Omnidirectional, Sensitive to				
O to the advantage	electrical fields				
Output impedance:	50 Ω; SMA-connector 6 V / 80 mA				
Power supply:	6 V / 80 MA				
HZ552 Magnetic Field Probe					
Frequency range:	<30 MHz to approx. 3 GHz				
Directional sensitivity:	like frame antenna, Sensitive to				
Biroctional Scholavity.	changing magnetic fields				
Output impedance:	50 Ω; SMA-connector				
Power supply:	6 V / 80mA				
HZ553 High Impedance Probe					
Frequency range:	<1 MHz bis ca. 3 GHz				
Input impedance:	<2 pF II 250 kΩ				
Attenuation:	in the range of				
	approx. 10:1 up to 30:1				
Max. input voltage:	10 Vpp				
Max. voltage of a non-insulated					
conductor:	30 V				
Output impedance:	50 Ω; SMA-connector				
Power supply:	6 V / 80 mA				
HZ554 Magnetic Field Probe (sma					
Frequency range:	<50 MHz to approx. 3 GHz				
Directional sensitivity:	like frame antenna, Sensitive to changing magnetic fields, High spatial resolution due to very small sensor area				
Max. voltage of a non-insulated					
conductor:	30 V				
Output impedance:	50 Ω; SMA-connector				
D .	6 V / 80 mA				
Power supply:	6 V / 80 mA				
Power supply:	6 V / 80 mA				
Power supply:  HZ555 Niedrig-Kapazitive-Sonde	6 V / 80 mA				
,	6 V / 80 mA 0.25 MHz to approx. 3 GHz				
HZ555 Niedrig-Kapazitive-Sonde					
HZ555 Niedrig-Kapazitive-Sonde Frequency range:	0.25 MHz to approx. 3 GHz				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 k $\Omega$				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated	0.25 MHz to approx. 3 GHz <0,2 pF II 250 kΩ 10 : 1 5 Vpp				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 kΩ 10 : 1 5 Vpp				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 k $\Omega$ 10 : 1 5 Vpp 30 V 50 $\Omega$ ; SMA-connector				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 kΩ 10 : 1 5 Vpp				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 k $\Omega$ 10 : 1 5 Vpp 30 V 50 $\Omega$ ; SMA-connector				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe	0.25 MHz to approx. 3 GHz <0,2 pF II 250 k $\Omega$ 10 : 1 5 Vpp 30 V 50 $\Omega$ ; SMA-connector 6 V / 80 mA				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe Frequency range:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 kΩ 10:1 5 Vpp 30 V 50 Ω; SMA-connector 6 V / 80 mA <30 MHz to approx. 3 GHz				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe	0.25 MHz to approx. 3 GHz <0,2 pF II 250 kΩ 10:1 5 Vpp 30 V 50 Ω; SMA-connector 6 V / 80 mA <30 MHz to approx. 3 GHz like frame antenna. Sensitive to				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe Frequency range:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 kΩ 10:1 5 Vpp 30 V 50 Ω; SMA-connector 6 V / 80 mA <30 MHz to approx. 3 GHz like frame antenna. Sensitive to changing magnetic fields, Radiation				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe Frequency range: Directional sensitivity:	0.25 MHz to approx. 3 GHz $<$ 0,2 pF II 250 k $\Omega$ 10 : 1   5 Vpp   30 V   50 $\Omega$ ; SMA-connector   6 V / 80 mA $<$ 30 MHz to approx. 3 GHz   like frame antenna. Sensitive to changing magnetic fields, Radiation of changing magnetic fields				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe Frequency range: Directional sensitivity:  Max. input power:	0.25 MHz to approx. $3 \text{ GHz}$ <0,2 pF II 250 k $\Omega$ 10:1 5 Vpp 30 V 50 $\Omega$ ; SMA-connector 6 V / 80 mA <30 MHz to approx. $3 \text{ GHz}$ like frame antenna. Sensitive to changing magnetic fields, Radiation of changing magnetic fields 0.5 W (short term)				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe Frequency range: Directional sensitivity:  Max. input power:	0.25 MHz to approx. $3 \text{ GHz}$ <0,2 pF II 250 k $\Omega$ 10:1 5 Vpp 30 V 50 $\Omega$ ; SMA-connector 6 V / 80 mA <30 MHz to approx. $3 \text{ GHz}$ like frame antenna. Sensitive to changing magnetic fields, Radiation of changing magnetic fields 0.5 W (short term)				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply: HZ556 Radiation Probe Frequency range: Directional sensitivity:  Max. input power: Output impedance:	0.25 MHz to approx. 3 GHz <0,2 pF II 250 kΩ 10:1 5 Vpp 30 V 50 Ω; SMA-connector 6 V / 80 mA  <30 MHz to approx. 3 GHz like frame antenna. Sensitive to changing magnetic fields, Radiation of changing magnetic fields 0.5 W (short term)				
HZ555 Niedrig-Kapazitive-Sonde Frequency range: Input impedance: Attenuation: Max. input voltage: Max. voltage of a non-insulated conductor: Output impedance: Power supply:  HZ556 Radiation Probe Frequency range: Directional sensitivity:  Max. input power: Output impedance:	0.25 MHz to approx. $3 \text{ GHz}$ <0,2 pF II $250 \text{ k}\Omega$ 10: 1 5 Vpp  30 V 50 $\Omega$ ; SMA-connector 6 V / 80 mA  <30 MHz to approx. $3 \text{ GHz}$ like frame antenna. Sensitive to changing magnetic fields, Radiation of changing magnetic fields 0.5 W (short term) 50 $\Omega$ ; SMA-connector				

Package content:					
Probe	Probe-Set HZ540	Probe-Set HZ540 L	Probe-Set HZ550	Probe-Set HZ550 L	
HZ551	•	•	•	•	
HZ552	•	•	•	•	
HZ553	•		•		
HZ554			•	•	
HZ555		•		•	
HZ556			•	•	

### Accessories included:

HZ540 1 HZ551 Electrical Field Probe

1 HZ552 Magnetic Field Probe 1 HZ553 High Impedance Probe

1 SMA to N-Cable 1.2 m

Case User manual

**HZ550** 1 HZ540 Basic Set

1 HZ554 Magnetic Field Probe 1 HZ556 Active antenna 1 SMA to N-Cable 1.2 m

### Probe Set HZ540L und HZ550L

$$\label{eq:LHZ540L} \begin{split} \text{LHZ540L} &= \text{HZ540} \text{ (without HZ553)} + \text{HZ555 Low Capacitance Probe} \\ \text{HZ550L} &= \text{HZ550} \text{ (without HZ553)} + \text{HZ555 Low Capacitance Probe} \end{split}$$