

## Hand-held Magnetic Loop Antenna, type MTA-MLA-930A Item no. 11946

### Short description

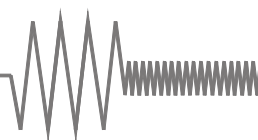
The probes MTA-MLA-930A measure only magnetic field strength and use E field shielding. This is also true when fictitious E field strength is derived from magnetic field strength via the characteristic field impedance of the free space. Fictitious electric field strength has been used for many years. Especially in the common AM frequency ranges the field strength of broadcast transmitters was measured under far field conditions.

For one probe there are different conversion factors for the calculation of fictitious electric and magnetic field strength level. They differ by 51,5 dB and so at least one of the conversion factors will be "odd" and inconvenient. For this reason conversion factors (antenna factors) of the hand-held probes are optimised for the calculation of the fictitious electric field strength level in dBmV/m.



### Characteristics

- ▶ Active hand-held magnetic probe
- ▶ Frequency range 9 kHz – 30 MHz
- ▶ Max. H field strength 0,4 A/m
- ▶ Max. fictive E field strength 150 V/m
- ▶ Full frequency range
- ▶ Convenient antenna factor for electric field strength



## Hand-held Magnetic Loop Antenna, type MTA-MLA-930A Item no. 11946

### Technical datas

#### Electrical specification:

Frequency range:	9 kHz – 30 MHz
Maximum field strength:	150 V/m fictive electric field strength, 0,4 A/m magnetic field strength
Correction for H field strength:	Magnetic field strength [dB $\mu$ A/m] – receiver reading [dB $\mu$ V] 11,5 dB
Correction for fictive E field strength:	Fictive electric strength [dB $\mu$ A/m] – receiver reading [dB $\mu$ V] +40 dB
Power supply:	+12V / 0,15 A separate power cable

#### Delivery package:

- +12V / 0,15 A power supply cable with banana plugs
- 50  $\Omega$  coaxial cable with BNC connector male

#### Comments:

Warranty: 12 months

#### Recommended accessories:

- measurement cable assembl.
- preamplifier

#### Connectors:

Measuring output:	50 $\Omega$ coaxial cable with BNC connector male
-------------------	---

#### Mechanical specification:

Dimensions:	Loop diameter 170 mm, length including handle 340 mm
Weight:	Approx. 1 kg, with cable and connector approx. 1,5 kg
Loop shielding:	Chromium plated brass
Amplifier box:	Chromium plated brass

### Operation

The probe can be either mounted on a tripod (optional adapter) or used hand-held. Using a tripod consisting of insulating material avoids negative influence on the field. Every day measurement practice shows only little influence caused by standard environment such as tables, walls and human bodies. The probe is directional. Maximum can be found by rotating the probe. The directivity can be used to direction finding of radiation sources.