

## EM-6873 | Antenna, Loop Sensor



### Description

The EM-6873 Loop Sensor Antenna uses passive circuits to transform magnetic field components between 20 Hz - 100 kHz to an equivalent open circuit two-terminal voltage on the receiving instrument. Use of the conversion Factor Chart, supplied with each antenna, will yield the strength of the magnetic induction field referenced to a uniform field. The loop is electrostatically shielded and therefore is sensitive only to the magnetic component (B-field) of the electromagnetic fields.

### Applications

The Loop Sensor Antenna fully meets the magnetic field radiated emission test requirements RE01 and RE101.

The EM-6873 may be used with receivers having input impedance greater than 50 ohm. Calibration into 10 kilohm or greater impedance is provided, as well as the standard 50 ohm calibration.

The EM-6873 is designed to conveniently provide both 7 and 50 cm spacing from the EUT required by RE101.

### Specifications

#### Electrical

**Frequency Range:** 20 Hz – 100 kHz

**Conversion Factor:** As per MIL-STD-461

**Output Connector:** Type BNC, female

#### Mechanical

**Boom Length:** 49.75 cm (19.59")  
50 cm (19.69") from coil center

**Probe:** 60 mm (2.36")  
70 mm (2.76") from coil center

**Size:** 146 mm (5.75") diameter

**Mean Diameter of coil:** 133 mm (5.24")

**Coil:** 36 turns of #7-41 Litz wire

**Weight:** 795 g (1.75 lbs.)

Ref: 100624

Specifications subject to change without notice.  
Unless otherwise specified, product is manufactured in  
Johnstown, NY USA.

