

## EM-6879 | Antenna, Loop



### Description

The EM-6879 Loop Antenna is used for magnetic field measurements over the frequency range of 10 kHz to 30 MHz. The EM-6879 is designed for use with any 50 ohm Receiver System. The antenna has a balanced Faraday shield that reduces its response to electric fields to a vanishingly small amount so that it can produce a practically pure magnetic field response.

### Applications

The EM-6879 is suited for use in compliance testing to the various revisions of MIL-STD-461, CISPR standards, plus other government and commercial standards. The antenna is designed to work into a 50-ohm system and its calibration chart is based on this use. The calibration chart gives values of antenna factor for finding magnetic field strength (H). To find the field strength (H) in dB (uA/m), add the factor from the scale in dB(S/m) to the measured two-terminal input voltage obtained by the receiver in dB(uV).

The EM-6879 Loop Antenna is, electrically, a magnetic dipole and thus having a dipole pattern must be oriented properly for best sensitivity.

## Specifications

### Electrical

#### Frequency Range

(Calibrated): 10 kHz - 30 MHz

**Impedance:** Calibrated for use in a 50-ohm system

**Signal Output Connector:** Type BNC, female

**Signal Injection Connector:** Type BNC, female

### Mechanical

**Outside Diameter:** 635 mm (25")

**Height:** 686 mm (27")

**Weight:** 0.5 kg (1.1 lbs.)

Ref: 100501

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

