

# Magnetic Antennas

## The TEM/3 Magnetic Antenna

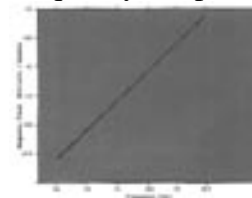
The TEM/3 antenna is a single channel magnetic field antenna useful for transient electromagnetic (TEM), controlled source audio-frequency magnetotelluric (CSAMT), and other types of EM geophysical surveys measuring vertical or horizontal fields. Multiple units may be used simultaneously to measure multiple axes.



### Features

- The TEM/3 can be used inside or outside the transmitting loop for transient measurements.
- Frequency calibrations are provided for both harmonic and single frequency applications.

Frequency Response



### Optional Equipment

- Antenna STAND/Z for vertical measurements.
- Antenna STAND/XZ for a combination of vertical and horizontal measurements.

### General

- Power: Two 9V alkaline batteries
- Battery life: 7 days at 12 hours per day
- Amplifier gain: 33
- Number of turns: 4000
- Effective Area: 10,000 m<sup>2</sup>
- Minimum Detectable Signal: .007 gamma\*Hz
- Maximum signal without saturation: 68,000 gamma\*Hz
- Delay constant: 15 microseconds
- Multiple unit crosstalk: > 60db isolation
- Electrical response: dB/dt to above 8 KHz

### Physical

- Length: 61 cm (24 in)
- Diameter: 11 cm (4.3 in)
- Weight: 4.5 kg (10 lb)
- Core: ceramic ferrite, 2.5 x 45.7 cm (1 x 18 in)