

TEM/4 Magnetic Antenna

Single channel magnetic-field antenna for EM surveys



The TEM/4 antenna is a single channel, magnetic-field antenna designed specifically for transient electromagnetic (TEM), controlled source audio-frequency magnetotelluric (CSAMT), and other types of EM geophysical surveys that require measuring vertical or horizontal fields.

Multiple units may be used simultaneously to measure multiple axes.

The TEM/4 can be used inside or outside the transmitting loop for transient measurements.

Frequency calibrations are provided for both harmonic and single-frequency applications.

Optional

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

Specifications

Power: Two 9V batteries
Alkaline: 7 days at 10 hours/day (70 hours)
Lithium: 14 days at 10 hours/day (140 hours)
Amplifier gain: 33
Number of turns: 4000
Effective area: 10,000 m²
Minimum detectable signal: 7×10^{-3} nanotesla/sec
Maximum signal without saturation: 68×10^3 nanotesla/sec
Delay constant: 15 microseconds
(from the antenna preamp/low-pass filter)
Multiple unit cross-talk: > 60db isolation
Length: 56cm
Diameter: 5.1cm
Weight: 2.3 kg
Core: Ceramic ferrite, 2.54 x 22.9 cm

