

# Active loop Antenna

# Model RF500

Loop antenna as required for EMC emissions tests

- **Frequency Range:** 9 kHz to 30 MHz
- **Built-in, Battery Operated Preamplifier**
- **Fibre Optic Remote Monitor/Control option**
- **Electric or Magnetic Field Measurements**
- **Individual Calibration per IEEE 291 Included**



Also known as Magnetic Loop Antenna, the RF500 is compliant with CISPR 16-1-4. It is ideal for emissions measurements as required by various EMC standards such as FCC 18, CISPR 11, CISPR 13, CISPR 14, CISPR 32 and many more. The built-in, low-noise preamplifier, increases overall measurement sensitivity as well as the overall signal to noise ratio. As per ANSI C63.4-2014, the use of active loop antenna for compliance testing is permitted in a non-shielded environment ONLY if the saturation indicator is continuously monitored during the course of testing. The Remote Antenna Interface (RF501) is a compact controller which satisfies this requirement. It can be used to enable/disable RF measurement circuit and monitor saturation and battery low conditions remotely via a fibre optic cable up to 30m in length.

## Technical Specifications:

Frequency range	9KHz – 30MHz	E Field antenna. factors	13.4 – 16.4 dB/m
Loop size	0.5 x 0.5m	Saturation level	>120dBuV/m, >68.5dBuA/m
Nom. Impedance	50ohm (o/p port)	Antenna factor variation	+/- 1.5dB
Battery type	6VDC NimH (rechargeable)	RF connector	BNC
Ave. battery life	10 – 12 hours	Size:	51 x 50 x 27cm
Sensitivity	-3dBuA/m@ 10KHz -44dBuA/m @ 1MHz	Weight	2.5kg

## Ordering information:

RF500	Loop antenna
RF501	Remote antenna interface
RF502	Tripod stand



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