Ground Tester

TECHNICAL FEATURES :

The AFM2407TL ground tester is an autonomous and polyvalent product. Indeed, it is possible to measure an earthing system resistance, but also the soil resistivity. The measure of the soils resistivity above your project will allow to set with an optimal way the needs for the earthing systems to realize.

This tool is adapted to measure lightning conductors, pylons, buildings earthing systems resistances... thanks to an important measure scale from 0 Ω to 20 k Ω with a 0,01 Ω resolution. A 3 -1/2 digits screen will allow an easy and suitable use.

The AFM2407TL autonomy is linked to a internal battery system. The recharging of this battery is secured by the use of a microprocessor which adapts the charge current level to the battery in order to obtain an optimum lifetime.

To avoid voltage problems «extraneous » in the ground, filter systems allow a reliable measure. In the cases when the perturbations are too much regarding to the internal generator signal, a sonorous signal resounds.

 $\underline{\mbox{The eathing system resistance}}$ is done with the 3 earthing rods system :





In this method a current having a 1470 Hz frequency is injected in the ground by a generator integrated in the tester. By a voltage measure at a given place, it is then possible to determinate the earthing resistance by a simple Ohm law.

<u>The earth resistivity is</u> done with the Wenner method. This method consists in driving in line earthing rods separated with a constant D distance. To obtain the ground resistivity, it is nessary to use the Wenner equation:

$$\rho = 2\Pi RD$$

Associated products

Ground Tester

4 earthing rods method :



• TECHNICAL FEATURES :

Measure range	$0 - 20 \text{ k}\Omega$ for the resistance 0 - 200 V for the AC voltage
Resolution	0,01 Ω
Precision	+/- 2% of the measured value + 1% of the selected range value
Measure operation frecuency	1470 Hz
Functionning temperature	-10°C / +50°C
Storage temperature	-25°C / +65°C
Humidity	95% RH (without condensation)
Weight	2kg
Dimensions	221 x 189 x 99 mm
Battery	12V can be recharged
	Charger : 220V / 240V ~
	Charger « cigar-lighter »
Measure current	< 15mA (peak to peak)
Measure power	< 0,5W

KIT COMPOSITION

- 1 AFM 2407 TL ground tester
- 1 mains charger
- 1 Charger « cigar-lighter »
- 4 copper earthing rods
- 1 40 m length red cable
- 2 20 m length blue and green cables
- 15 m length black cable
- 15 m length green cable
- 1 50 m tape measure
- 1 bag for the tester + 1 bag for the accessories