



ORDER CODE **HV000071**

# M71

DEVICE FOR MEASURING EARTH RESISTANCE



M71 has been developed to measure **earth resistance with 2 wires and 3 wires** by **voltammetric method** in compliance with standard IEC/EN61557-1.

This device allows carrying out measurements with a **wide measuring range (50kΩ)** and an efficient internal automatic compensation of the disturbance effects found on the installations, and it is provided with an **ergonomic design** with electronic function selector for **quickly** carrying out the tests.

The 2-wire method allows carrying out earth measurement by taking advantage of appropriate external masses as a reference (metal surfaces, tubes, neutral conductor, etc.), which is particularly useful in domestic environments where, because of logistic problems, it is not possible to use the 3-wire method.



ORDER CODE **HP002000 | HP002100**

# T2000 | T2100

CLAMP METERS FOR MEASURING EARTH RESISTANCE WITH STAKELESS TESTING METHOD AND LEAKAGE CURRENT UP TO 20A AC



T2000 e T2100 are professional voltammetric clamps **specially developed to evaluate resistance of earth rods with no need to disconnect any part of the system**. The inner part of the device is made of 2 jaws, one for current reading and the other for voltage generation. The voltage jaws generate a potential (E) on the loop during resistance (R) measurement. A current (I) is consequently generated on the loop and is measured by the current jaws. Based on the value of parameters E and I, the instrument displays the resistance R value calculated as their ratio. The value measured by the device can be used in case the single rods do not influence each other. T2000 also measures **AC current up to 20A** and **leakage current with resolution 0.05mA**.

This devices comply with standard IEC/EN61010-1 in **CAT III 150V** and they are the ideal solution for measurements to be carried out both in domestic and in industrial environments.



## Functions

- Earth measurement with 2 terminals
- Earth measurement with 3 terminals
- Measuring range: 0.01Ω -50kΩ
- Compensation of disturbance voltages
- Compensation of test cables

## Accessories provided

KIT0071	Set of 3 cables + 3 alligator clips + 2 metal probes
SP-6085	Soft carrying bag
	User manual on CD-ROM
	Quick user guide
	ISO9000 calibration certificate

## Functions

- Earth resistance with stakeless testing method
- Measurement of leakage current on earth systems (**only T2000**)
- Setting of alarm thresholds on measurements
- Storage of measurement results
- Detection of disturbance currents on measurement
- Data HOLD, Backlight, Auto Power OFF
- Maximum diameter for clamp 32mm
- Serial interface RS-232 for connection to devices of **MacrotestG series (only T2100)**

## Technical Specifications

- Resistance measurement**
- Measuring range Ω: 0.010 ÷ 1000
  - Resolution Ω: 0.001 ÷ 20
  - Basic accuracy Ω: ± (1%reading + 0.01)
- TRMS current measurement (only T2000)**
- Measuring range: 0.00mA ÷ 20A
  - Resolution: 0.05mA ÷ 0.01A
  - Basic accuracy: ± (2.5%reading + 1mA)

## Main features

Power supply:	batteries type AA 4x1.5V
Display:	LCD display
Pollution level:	2
Safety:	IEC/EN61010-1
Measurement category:	CAT III 240V
Size (LxWxH):	240x100x45mm
Weight (batteries included):	630g

## Optional accessories

1066-IECN	Connector for cable extension 4mm
-----------	-----------------------------------

## Main features

Power supply:	batteries type AA 4x1.5V
Memory:	99 locations
Display:	LCD 4-digit display + decimal point, backlight
Pollution level:	2
Safety:	IEC/EN61010-1-2-032
Measurement category:	CAT III 150V
Size (LxWxH):	293x90x66mm
Weight (batteries included):	1320g

## Accessories provided

	Resistive test loop
	Batteries
	User Manual
	ISO9000 calibration certificate
C2100	Connection cable Hypertac / Jack 3,5mm RS-232 ( <b>only T2100</b> )
	Rigid Carrying case