AMRU-200

Telurometer

AMRU-200 GPS

Technical method 2P/3P/4P

Pulse method, three types of pulse slope measurement 4/10µs, 8/20µs, 10/350µs

As well as by a double clamp without the need for auxiliary electrodes.

The resistance of the soil

built-in GPS

The GPS measurement coordinates are stored in the memory of the device.

amperis

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It allows the following measurements to be made :
-Resistance to earth by means of auxiliary electrodes
-Grounding resistance using auxiliary electrodes and clamps (for multiple grounding measurements)
-The earth resistance with the help of double clamps (for measuring the earth electrode when the auxiliary electrodes cannot be used).
-Soil resistivity (according to Wenner's method).
-Current using pliers (e.g. leakage current), as well as elastic pliers (harmful currents).
-Measurement of the continuity of the compensation and protection connections (that respect IEC 60364-6-61:2000 pt. 6.12.2) with self-neutralizing function - per current 200mA.

In addition:
-Measurement of the resistance of the auxiliary electrodes Rs and Rh.
-Measurement of the disturbance voltage
-Measurement of the frequency of the disturbing signal
-Measurement in the presence of disturbance voltage in networks at the frequency of 16 2/3 Hz, 50 Hz, 60 Hz
400Hz (with automatic/manual frequency selection)
-Selection of the maximum measurement voltage (24V and 50V)
-Enter the distance between electrodes for resistivity in meters (m) and feet (ft).
-Storage for 990 measurements (10 banks of 99 cells)
-Calibration of the clamps used.
-Real Time Clock (RTC).
-Data transmission to the computer (USB)
-Battery energy indicator

Measurement of the UN disturbance voltage (RMS):

Range	Resolution	Accuracy
0-100V	1V	±2% v.m.v. +3 digits

Measurement of the frequency of disturbances:

Range	Resolution	Accuracy
15...450Hz	1Hz	±1% v.m.v. +2 digits

Continuity measurement of protective and compensating connections
Measuring range according to IEC61557-5: 0,24Ω...19,9kΩ

Range	Resolution	Accuracy
0,00...3,99Ω	0,001Ω	±2% v.m.+4 digits
4,0...39,9Ω	0,01Ω	±2% v.m.v. +2 digits
40...399Ω	0,1Ω	
400...3999Ω	1Ω	
4...19,9kΩ	10Ω	±5% v.m.v. +2 digits

Dynamic measurement of the earth resistance (RD) - pulse method (4p):

Range	Resolution	Accuracy
0,00...99,9Ω	0,1Ω	±2.5% v.m.+3 digits
100...200Ω	1Ω	

Measurement of the earth resistance (3 or 4 pole method):
Measuring range according to IEC61557-5: 0,30Ω...19,9kΩ

Range	Resolution	Accuracy
0,00...3,999Ω	0,001Ω	±2% v.m.+4 digits
4,0...39,99Ω	0,01Ω	±2% v.m.v. +2 digits
40,0...399,9Ω	0,1Ω	
400...3999kΩ	1Ω	
4.0...19,99kΩ	10Ω	±5% v.m.v. +2 digits

Resistance measurement of the $_{RH}$ and $_{RS}$ auxiliary electrodes:

Range	Resolution	Accuracy
0,00...999Ω	1Ω	±5% ($_{RS+RE+RH}$)+8 digits
1,0kΩ...9,99kΩ	10Ω	
10 kΩ ...19,9kΩ	100Ω	

Reading of the measured values of the resistance of the auxiliary electrode RH and RS on the right display (separate part of the display)

Measurement of the resistance of multiple earth connections using clamps and auxiliary electrodes (3 wires + clamps)
Measuring range according to IEC61557-5: 0,12Ω...1999Ω

Range	Resolution	Accuracy
0,00...3,99Ω	0,001Ω	±8% v.m.+4 digits
4,0kΩ...39,99Ω	0,01Ω	±8% v.m.v. +3 digits
40 ...399,9Ω	0,1Ω	
400.1999Ω	1Ω	

Measurement of soil resistivity Measurement method: Wenner, p=2πLRE

Range	Resolution	Accuracy
0.00...199,9Ωm	0.1Ωm	Depends on the base error of the ROE measurement in the 4-conductor system, but no less than ±1 digit
200...1999Ωm	1Ωm	
2.00k...19,99kΩm	10Ωm	
20.0k...99.9kΩm	100Ωm	
100...999kΩm	1kΩm	

Measuring the resistance of multiple ground connections using double clamps

Range	Resolution	Accuracy
0,00...19,99Ω	0,01Ω	±10% v.m.v. +3 digits
20,0...149,9Ω	0,1Ω	±20% v.m.v. +3 digits

Measurement of alternating current

Range	Resolution	Accuracy
0.1...99.9mA1	0.1mA	±8% v.m.v. +5 digits
100...999mA1	1mA	±8% v.m.v. +3 digits
1,00...4,99A1	0,001A	±5% v.m.v. +5 digits
5,0...9,99A1[2]	0,01A	±5% v.m.v. +5 digits
10...99,9A1[2]	0,1A	
100...300A1[2]	1A	

1-Receiving clamps (diameter 52mm) - C-3 2- Flexible clamps (diameter 400mm) - F-1

AMRU-200 GPS Detailed Specifications

Electrical Safety :

Type of insulation	Double, according to EN 61010-1 and IEC 61557 standards
Measurement category	CAT III 600V in accordance with EN 61010-1
Protection class according to EN 60529	IP54

Other technical data:

Screen	graphic LCD, illuminated
Interface	USB
Number of measurements using	> 300
A set of accumulators	
Garantí	36 months

Nominal uso condiciones:

Temperatura de trabajo	-10...+50oC
Temperatura de almacenamiento	-20...+70oC
Humedad	20...80%

Standard accessories :

50 m cable on reel; yellow
25 m cable on reel; red
25 m cable on reel; blue
1.2 m cable with banana plug; red
2.2 m cable with banana plug; black
USB cable for data transmission
Conductor for charging batteries in the cigarette lighter socket car (12V)
30 cm ground probe (4 pieces)
L2 Case
Crocodile K01; black
Crocodile K02; red
Ni-MH battery 4.8V 4.2Ah
Go to
Power supply cable
Power supply for charging Z7 batteries
Meter carrying harness
Calibration certificate
User's manual

Optional Accessories :

Software for creating documentation
80 cm probe to be inserted in the ground
N-1 Emission tweezers (Ø=52mm)
2 m two-wire cable with banana plugs
Receiving clamps C-3 (Ø=52mm)
LR14 battery case (size C)
Probe cover L3 for 80 cm probe
Spring clamps (Rogowski coil) F1