



1. ELECTRICAL SPECIFICATIONS

Accuracy is calculated as \pm [% readings + (number of dgt * resolution)] at reference conditions

Step/Contact voltage measurements (unit HT2055M)

| Measure voltage range | Resolution | Accuracy |
|-----------------------|------------|--|
| 0.01 ÷ 19.99mV | 0.01mV | $\pm(2.0\% \text{ rdg} + 2 \text{ dgt})$ |
| 20.0 ÷ 199.9mV | 0.1mV | |
| 200 ÷ 1999mV | 1mV | |
| 2.00 ÷ 19.99V | 0.01V | |
| 20.0 ÷ 59.9V | 0.1V | |

| Calculated voltage range | Resolution | Accuracy |
|--------------------------|------------|----------------------|
| 0.0 ÷ 199.9V | 0.1V | Calculated value (*) |
| 200 ÷ 999V | 1V | |
| 1.00kV ÷ 9.99kV | 10V | |

(*) The calculated value of step/contact voltage is obtained by the relationship: $U_s = U_{meas} \cdot I_{ft} / I_{gen}$; $U_c = U_{meas} \cdot I_{ft} / I_{gen}$.

Range of fault current (selectable):

1A ÷ 200kA

Input resistance(selectable):

1k Ω , 1M Ω

Noise reducing/erasing:

DSP filtering 55Hz, 64dB rejection on noise at 50/60Hz

Earth resistance measurement (unit HT2055S)

| Measurement range | Resolution | Accuracy |
|---------------------------------|----------------|--|
| 0.001 Ω ÷ 1.999 Ω | 0.001 Ω | $\pm(2.0\% \text{ rdg} + 5 \text{ dgt})$ |
| 2.00 Ω ÷ 19.99 Ω | 0.01 Ω | |
| 20.0 Ω ÷ 99.9 Ω | 0.1 Ω | |
| 100.0 Ω ÷ 199.9 Ω | | $\pm(5.0\% \text{ rdg})$ |

Open voltage:

< 50V AC

Test current:

< 7.5A

Frequency of test signal:

55Hz

Influence of probe resistance:

$\leq \pm(10\% \text{ rdg} + 10 \text{ dgt})$

(Rc, Rp)max

(10 Ω + 100R) o 2k Ω considering the lower value

Automatic test on the probe resistance:

Yes

Automatic detection of voltage noise

| Generated current range | Resolution | Accuracy |
|-------------------------|------------|--|
| 0.00 ÷ 9.99A | 0.01A | $\pm(3.0\% \text{ rdg} + 5 \text{ dgt})$ |
| 10.0 ÷ 99.9A | 0.1A | $\pm(3.0\% \text{ rdg} + 3 \text{ dgt})$ |

Generated current:

55A max

Test voltage:

<55V

Test frequency:

55Hz

Soli resistivity measurement (unit HT2055S)

| Measurement range | Resolution | Accuracy |
|-------------------------------------|------------------|---|
| 0.00 Ω m ÷ 9.99 Ω m | 0.01 Ω m | Calculated value, consider accuracy of Resistance to earth function |
| 10.0 Ω m ÷ 99.9 Ω m | 0.1 Ω m | |
| 100 Ω m ÷ 999 Ω m | 1 Ω m | |
| 1.00k Ω m ÷ 9.99k Ω m | 0.01k Ω m | |
| 10.0k Ω m ÷ 99.9k Ω m | 0.1k Ω m | |

Measurement principle:

Wenner method $\rightarrow \rho = 2 \cdot \pi \cdot \text{distance} \cdot R$



2. GENERAL SPECIFICATIONS

Power unit (HT2055S)

| | |
|-----------------------------------|--|
| Power supply: | 115V/230VAC ($\pm 10\%$), 50/60Hz |
| Max. power consumption: | 750VA |
| Protection on power supply: | fuse T 5A / 250V (6mm x 30mm) |
| Safety condition on meter: | IEC/EN61010-1, IEC/EN61557-1 |
| Safety condition on test leads: | IEC/EN61010-031 |
| Installation over 1kVAC: | HD 637 S1 |
| Step/Contact voltage measurement: | EN50522, IEC60936-1 |
| Earth resistance measurements: | IEC/EN61557-5, IEC/EN60364 |
| Spanish guideline: | RAT 2008 |
| Insulation: | class I |
| Measurement category: | CAT II 300V, CAT IV 50V |
| Pollution degree: | 3 |
| Mechanical protection: | IP30 |
| Display: | LCD dot matrix (128 x 64) with backlight |
| Internal memory: | 1000 locations |
| Generated current: | values storage for min 24h |
| Communication interface: | RS-232 (with voltmetric unit) |
| Dimensions (L x W x H): | 563 x 257 x 275mm |
| Weight (without accessories): | 29.5kg |

Voltmetric unit (HT2055M)

| | |
|---------------------------------|---|
| Power supply: | 6x1.2V rechargeable batteries NiMH type AA LR03 6x1.5V alkaline batteries type AA LR03 |
| Battery (chargeable) life: | 12 hours (typical) |
| External power supply: | 100-240V AC, 50-60Hz / 12V DC |
| Safety condition on meter: | IEC/EN61010-1 |
| Safety condition on test leads: | IEC/EN61010-031 |
| Insulation: | double insulation |
| Measurement category: | CAT IV 50V |
| Pollution degree: | 2 |
| Mechanical protection: | IP40 |
| Display: | LCD dot matrix (128 x 64) with backlight |
| Auto Power OFF: | after 15 minutes of idleness (not disable) |
| Internal memory: | 1500 locations |
| Communication interface: | RS-232 and USB (to PC) |
| Dimensions (LxLaxH): | 230 x 115 x 103mm |
| Weight (with batteries): | 1.3kg |

ENVIRONMENTAL CONDITIONS:

| | |
|------------------------|--------------|
| Reference temperature: | 10°C ÷ 30°C |
| Reference humidity: | 35% ÷ 65%RH |
| Working temperature: | 0°C ÷ 40°C |
| Working humidity: | <80%RH |
| Storage temperature: | -10°C ÷ 60°C |
| Storage humidity: | <80%RH |

This instrument satisfies the requirements of Low Voltage Directive 2014/35/EU (LVD) and of EMC Directive 2014/30/EU

This instrument satisfies the requirements of 2011/65/EU (RoHS) directive and 2012/19/EU (WEEE) directive