1. TECHNICAL SPECIFICATIONS – GLOBAL EARTH AND RCD'S TEST

Accuracy is indicated as ± (% readings + no. of digits) at 23°C ± 5°C, relative humidity HR <70%

RCD Tripping time

Range (ms)	Resolution (ms)	Accuracy	Overload protection
2 ÷ 400	1	±(2.0% rdg + 2dgt)	605Vrms max

Nominal trip-out currents: 30mA, 30x5mA, 100mA, 300mA
RCD type: AC, Standard
Phase-Earth voltage: 110V ÷ 265V
Frequency: 50Hz ± 0.5Hz / 60Hz ± 0.5Hz
Limit contact voltage: 50V

Global Earth Resistance without RCD's tripping

Test current	Range (Ω)	Resolution (Ω)	Accuracy	Overload protection
15mA	1 ÷ 1999	1	±(5.0% rdg + 2dgt)	605Vrms max
100mA	0.1 ÷ 199.9	0.1	±(5.0% rdg + 3dgt)	

Phase-Earth voltage: 110V ÷ 265V
Frequency: 50Hz ± 0.5Hz / 60Hz ± 0.5Hz
Limit contact voltage: 50V

2. TECHNICAL SPECIFICATIONS – MULTIMETER FUNCTIONS

Accuracy is indicated as ± (% readings + no. of digits) at 23°C ± 5°C, relative humidity HR <70%

DC VOLTAGE (Autorange)

Range	Resolution	Accuracy	Input impedance	Overload protection
1.0mV ÷ 999.9mV	0.1mV	±(0.5%rdg + 2 dgt)	1MΩ	605Vrms max
1.000V ÷ 9.999V	1mV			
10.00V ÷ 99.99V	10mV			
100.0V ÷ 605.0V	100mV			

AC VOLTAGE TRMS (Autorange)

Range	Resolution	Accuracy (30 ÷ 70Hz)	Accuracy (70 ÷ 400Hz)	Input Impedance	Crest factor
1.0mV ÷ 999.9mV	0.1mV	±(1.0%rdg + 2dgt)	±(2.0%rdg+2 dgt)	1MΩ	3
1.000V ÷ 9.999V	1mV				1.5
10.00V ÷ 99.99V	10mV				
100.0V ÷ 605.0V	100mV				

AC/DC VOLTAGE: MAX / MIN / AVG / PEAK

Function	Range	Resolution	Accuracy	Response time
MAX, MIN, AVG	1.0mV ÷ 999.9mV	0.1mV	±(5.0%rdg + 10dgt)	500ms
	1.000V ÷ 9.999V	1mV		
	10.00V ÷ 99.99V	10mV		
	100.0V ÷ 605.0V	100mV		
PEAK	10.0mV ÷ 999.9mV	0.1mV		1ms
	1.000V ÷ 9.999V	1mV		
	10.00V ÷ 99.99V	10mV		
	100.0V ÷ 605.0V	100mV		

HT ITALIA srl
Via della Boaria 40 - 48018 Faenza (RA)- Italy
Tel: +39-0546-621002 - Fax: +39-0546-621144
email: export@htitalia.it - web: http://www.htitalia.com

DC/AC CURRENT TRMS (with external clamp)

Range	Resolution	DC Accuracy	Accuracy (30 ÷ 70Hz)	Accuracy (70 ÷ 400Hz)	Crest factor	Overload protection
1.0mV ÷ 999.9mV	0.1mV	±(0.5%rdg+2 dgt)	±(1.0%rdg+2 dgt)	±(2.0%rdg+2 dgt)	3	605Vrms max
1.000V ÷ 1.200V	1mV				1.5	

Note: accuracy indicated don't consider clamp accuracy. Please refer also to transducers clamp user's manual.

AC/DC CURRENT: MAX / MIN / AVG / PEAK (with external clamp)

Function	Range	Resolution	Accuracy	Response time	Overload protection
MAX, MIN, AVG	1.0mV ÷ 999.9mV	0.1mV	±(5.0%rdg+10 dgt)	500 ms	605Vrms max
	1.000V ÷ 1.200V	1mV			
PEAK	10.0mV ÷ 999.9mV	0.1mV		1ms	
	1.000V ÷ 3.000V	1mV			

RESISTANCE AND CONTINUITY TEST

Range	Resolution	Accuracy	Continuity test	Overload protection
0.00Ω ÷ 39.99Ω	0.01Ω	±(1.0%rdg+5 dgt)	R ≤40Ω	605Vrms max for 1 minute
40.0Ω ÷ 399.9Ω	0.1Ω			
400Ω ÷ 3999Ω	1Ω			
4.00kΩ ÷ 39.99kΩ	10Ω			

FREQUENCY (with test leads)

Range	Resolution	Accuracy	Input voltage	Overload protection
30.0 ÷ 199.9Hz	0.1Hz	±(0.5%rdg+2 dgt)	1.0mV ÷ 605V	605Vrms max
200 ÷ 400Hz	1Hz			

FREQUENCY (with external clamp)

Range	Resolution	Accuracy	Input voltage	Overload protection
30.0 ÷ 199.9Hz	0.1Hz	±(0.5%rdg+2dgt)	1.0mV ÷ 1.000V	605Vrms max
200 ÷ 400Hz	1Hz			

PHASE SEQUENCE / CONFORMITY (1 wre measurement)

Type of measure	Voltage range (V)	Frequency range (Hz)	System type
SEQUENCE	90 ÷ 315 (Phase – Earth)	45 ÷ 65	up to 315 (Phase – Earth) up to 550V (Phase – Phase)
CONFORMITY			

PHASE SEQUENCE / CONFORMITY (2 wre measurement)

Type of measure	Voltage range (V)	Frequency range (Hz)	System type
SEQUENCE	110 ÷ 315 (Phase – Neutral)	45 ÷ 65	up to 315 (Phase – Earth) up to 550V (Phase – Phase)
CONFORMITY			

Max crest factor :1.5

NOTE: the two-wire measurement can be performed also phase to phase in plants without neutral, even with one phase to earth, but always with phase to phase voltage up to 550V

HT ITALIA srl
Via della Boaria 40 - 48018 Faenza (RA)- Italy
Tel: +39-0546-621002 - Fax: +39-0546-621144
email: export@htitalia.it - web: http://www.htitalia.com

3. GENERAL SPECIFICATIONS

DISPLAY:	
Features:	Dual numeric, 9999 points
Display update:	2 times/sec
Visible area:	73x73 mm
POWER SUPPLY:	
Batteries:	4 batteries 1.5V type LR6-AA-AM3-MN 1500
ELECTRICAL FEATURES:	
Conversion:	AC 16 Bit, TRMS
Sample frequency:	64 sample/period
MECHANICAL FEATURES:	
Dimensions:	240(W) x 100(L) x 45(D) mm
Weight (included batteries):	about 450 g
WORKING ENVIRONMENTAL CONDITIONS:	
Reference temperature:	23°C ± 5°C
Working temperature:	0° ÷ 40°C
Allowed relative humidity:	< 70% HR
Storage temperature:	-10 ÷ 60°C
Storage humidity:	< 70% HR
TEST VERIFIES REFERENCE STANDARDS:	
Continuity test with 200mA:	IEC 61557-4
Insulation resistance:	IEC 61557-2
Earth resistance:	IEC 61557-5
RCDs test:	IEC 61557-6
GENERAL REFERENCE STANDARDS:	
Safety of measuring instruments:	EN61010-1 + A2(1997)
Product type standard:	IEC61557-2, 3, 4, 5, 6
Insulation:	class 2 (double insulation)
Pollution degree:	2
Overvoltage category:	CAT III 550V AC Phase - Ground CAT III 550V AC Phase - Phase
Use:	internal use; max altitude: 2000m
EMC:	EN61326-1 (1998) + A1 (1999)

This instrument complies with the requirements of the European Low Voltage Directives 2006/95/EEC (LVD) and EMC 2004/108/EEC

HT ITALIA srl
Via della Boaria 40 - 48018 Faenza (RA)- Italy
Tel: +39-0546-621002 - Fax: +39-0546-621144
email: export@htitalia.it - web: http://www.htitalia.com