



1. ELECTRICAL SPECIFICATIONS

Accuracy is indicated as $\pm$ (%rdg + numbers of digits) at $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$, $<75\%\text{HR}$

DC VOLTAGE

Range	Resolution	Accuracy	Overload protection
400.0mV	0.1mV	$\pm(0.8\%rdg+3dgt)$	600VDC/ACrms
4.000V	0.001V	$\pm(0.8\%rdg+2dgt)$	
40.00V	0.01V		
400.0V	0.1V		
600V	1V	$\pm(1.0\%rdg+2dgt)$	

Input impedance: $10\text{M}\Omega$

AC VOLTAGE

Range	Resolution	Accuracy (45 ÷ 400Hz)	Overload protection
400.0mV	0.1mV	Not specified	600VDC/ACrms
4.000V	0.001V	±(1.0%rdg+3dgt)	
40.00V	0.01V		
400.0V	0.1V		
600V	1V	±(1.2%rdg+3dgt)	

Input impedance: $10\text{M}\Omega$

DC CURRENTS

Range	Resolution	Accuracy (*)	Voltage drop	Overload protection
10A	0.01A	$\pm(1.2\%\text{rdg}+3\text{dgt})$	200mV	Fuse 10A/600V

(*) Accuracy declared for current up to 6A in continuous mode, up to 7A for measures up to 3min, other for measures up to 2min

AC CURRENTS

Range	Resolution	Accuracy (*)	Voltage drop	Overload protection
10A	0.01A	$\pm(2.0\%\text{rdg}+5\text{dgt})$	200mV	Fuse 10A/600V

(*) Accuracy declared for current up to 6A in continuous mode, up to 7A for measures up to 3min, other for measures up to 2min

RESISTANCE

Range	Resolution	Accuracy	Open voltage	Overload protection
400.0Ω	0.1Ω	±(1.0%rdg+8dgts)	about 0.4V	600VDC/ACrms (< 30sec)
4.000kΩ	0.001kΩ	±(1.0%rdg+2dgts)		
40.00kΩ	0.01kΩ			
400.0kΩ	0.1kΩ			
4.000MΩ	0.001MΩ			
40.00MΩ	0.01MΩ	±(2.0%rdg+2dgts)		

DIODE TEST

Range	Direct voltage	Accuracy	Open voltage	Overload protection
	0 – 1.000V	$\pm(0.5\%\text{rdg}+3\text{dgt})$	about 1.5VDC	600VACrms (< 30sec)

**TEST CONTINUITY**

Range	Buzzer	Open voltage	Overload protection
•))	$R < 120\Omega$	about 0.5VDC	600VACrms (< 30sec)

FREQUENCY

Range	Resolution	Accuracy	Overload protection
99.99Hz	0.01Hz	$\pm(1.5\%rdg+5dgt)$	600VDC/ACACrms (< 30sec)
999.9Hz	0.1Hz		
9.999kHz	1Hz		
99.99kHz	10Hz		

DUTY CYCLE

Range	Resolution	Accuracy	Overload protection
20 – 80%	0.1%	$\pm(1.0\%rdg+5dgt)$	600VACrms (< 30sec)

Limit voltages for Frequency and Duty cycle measurements

Operating voltage	Frequency
$V_{MIN} \geq 1.5Vp-p$	0 – 400Hz
$V_{MAX} \leq 400Vrms$	
$V_{MIN} \geq 1.5Vp-p$	400 – 900Hz
$V_{MAX} \leq 10Vp-p$	
$V_{MIN} \geq 3.0Vp-p$	900Hz – 100kHz
$V_{MAX} \leq 10Vp-p$	

CAPACITANCE

Range	Resolution	Accuracy	Overload protection
5nF	0.001nF	±(5.0%rdg+25dgt)	600VACrms (< 30sec)
50nF	0.01nF	±(3.0%rdg+5dgt)	
500nF	0.1nF		
5μF	0.001μF		
50μF	0.01μF		
100μF	0.1μF(30s)	±(5.0%lrdg+10dgt)	



2. GENERAL SPECIFICATIONS

Display:

- LCD display, 3 ¾ digit with maximum reading 3999 counts with sign and decimal point
- Automatic polarity indication
- Backlight
- "OL" over range indication

Features:

- HOLD
- RANGE for manual selection
- REL for relative measurements
- Auto Power OFF after 15 minutes of don't work

Low battery indication:

- The symbol "" appears when the battery voltage is low

Operating temperature:

- -5°C to 40°C, <80%HR

Storage temperature:

- -10°C to 60°C, <70%HR

General informations:

- Altitude max: 2000m
- Pollution degree: 2
- Insulation: double insulation

Power supply:

- 2 x 1.5V alkaline batteries type AAA MN2400 LR03 AM4

Sizes:

- 163(L)x88(W)x48(H) mm

Weight (included batteries):

- 280g

Applied standards:

- LVD: EN 61010-1 CAT IV 600V – CAT III 1000V
- EMC: EN60326

This product conforms to the prescriptions of the European directive on low voltage 2006/95/EEC and to EMC directive 2004/108/EEC