



1. ELECTRICAL SPECIFICATIONS

Accuracy calculated as $\pm[\% \text{reading} + (\text{num dgt} * \text{resolution})]$ ta 18°C ÷ 28°C, <75%RH

DC VOLTAGE

Range	Resolution	Accuracy	Input impedance	Overload protection
400.0mV	0.1mV	$\pm(1.2\% \text{rdg} + 4 \text{dgt})$	7.8M Ω	600VDC/ACrms
4.000V	0.001V			
40.00V	0.01V			
400.0V	0.1V			
600V	1V	$\pm(1.5\% \text{rdg} + 2 \text{dgt})$		

DC VOLTAGE WITH LOW IMPEDANCE (LoZ)

Range	Resolution	Accuracy	Input impedance	Overload protection
400.0mV	0.1mV	$\pm(3.0\% \text{rdg} + 40 \text{dgt})$	ca. 3k Ω	600VDC/ACrms
4.000V	0.001V			
40.00V	0.01V			
400.0V	0.1V			
600V	1V			

AC TRMS VOLTAGE

Range	Resolution	Accuracy (50 ÷ 400Hz) (*)	Input impedance	Overload protection
4.000V	0.001V	$\pm(1.2\% \text{rdg} + 10 \text{dgt})$	7.8M Ω	600VDC/ACrms
40.00V	0.01V	$\pm(1.5\% \text{rdg} + 3 \text{dgt})$		
400.0V	0.1V			
600V	1V	$\pm(2.0\% \text{rdg} + 4 \text{dgt})$		

(*) Accuracy specified from 5% to 100% of measurement range, Frequency range: 50Hz ÷ 400Hz


AC TRMS VOLTAGE WITH LOW IMPEDANCE (LoZ)

Range	Resolution	Accuracy (50 ÷ 400Hz) (*)	Input impedance	Overload protection
4.000V	0.001V	$\pm(3.0\% \text{rdg} + 40 \text{dgt})$	ca. 3k Ω	600VDC/ACrms
40.00V	0.01V			
400.0V	0.1V			
600V	1V			

RESISTANCE

Range	Resolution	Accuracy	Overload protection
400.0 Ω	0.1 Ω	$\pm(1.2\% \text{rdg} + 4 \text{dgt})$	250VDC/ACrms
4.000k Ω	0.001k Ω	$\pm(1.0\% \text{rdg} + 2 \text{dgt})$	
40.00k Ω	0.01k Ω	$\pm(1.2\% \text{rdg} + 2 \text{dgt})$	
400.0k Ω	0.1k Ω		
4.000M Ω	0.001M Ω	$\pm(2.0\% \text{rdg} + 3 \text{dgt})$	
40.00M Ω	0.01M Ω		

DIODE TEST

Range	Resolution	Accuracy	Open voltage	Overload protection
	1mV	$\pm(10\% \text{rdg} + 5 \text{dgt})$	approx 1.5VDC	250VDC/ACrms

**CONTINUITY TEST**

Range	Buzzer	Test current	Overload protection
·)))	R<30Ω	<0.3VmA	250VDC/ACrms

FREQUENCY

Range	Resolution	Accuracy	Sensitivity	Overload protection
5.000Hz	0.001Hz	±(1.5%rdg+5dgt)	>8Vrms	250VDC/ACrms
50.00Hz	0.01Hz			
500.0Hz	0.1Hz	±(1.2%rdg+3dgt)		
5.000kHz	10Hz			
50.00kHz	10Hz			
500.0kHz	100Hz	±(1.5%rdg+4dgt)		
5.000MHz	1kHz			
10.00MHz	10kHz			

Note: in AC Voltage the frequency range is: 10Hz ÷ 10kHz ; Sensitivity: > 15Vrms

DUTY CYCLE

Range	Resolution	Accuracy	Sensitivity	Overload protection
0.5 - 99%	0.1%	±(1.2%rdg + 2dgt)	>8Vrms	250VDC/ACrms

100µs< pulse width <100ms ; Frequency range: 5Hz ÷ 150kHz

Note: in AC Voltage the frequency range is: 10Hz ÷ 10kHz ; Sensitivity: > 15Vrms

CAPACITANCE

Range	Resolution	Accuracy	Overload protection
40.00nF	0.01nF	±(5.0%rdg+7dgt)	250VDC/ACrms
400.0nF	0.1nF	±(3.0%rdg+5dgt)	
4.000µF	0.001µF		
40.00µF	0.01µF		
100.0µF	0.1µF	±(5.0%rdg+5dgt)	

TEMPERATURE WITH TYPE K PROBE

Range	Resolution	Accuracy (*)	Overload protection
-20°C ÷ 400°C	0.1°C	±(3.0%rdg+5°C)	250VDC/ACrms
400°C ÷ 760°C	1°C		
-4°F ÷ 752°F	0.1°F	±(3.0%rdg+9°F)	
752°F ÷ 1400°F	1°F		

(*) Accuracy of instrument without probe



2. GENERAL SPECIFICATIONS

Display:

- LCD Display, 4 dgt, 4000 counts, sign and decimal point
- Automatic polarity indication
- Backlight
- "OL" over range indication

Features:

- HOLD
- REL
- Auto Power OFF after 30 minutes of idleness

Low battery indication:

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

Operating temperature:

- 0°C ÷ 50°C, <70%HR

Storage temperature:

- -20°C ÷ 60°C, <80%HR

General informations:

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

Power supply:

- 1x9V alkaline battery NEDA 1604 IEC 6F22

Dimensions (L x W x H)

- 175 x 85 x 55mm
- Mechanical protection: IP40

Weight (included battery)

- 360g

Reference guidelines:

- Safety :IEC/EN61010-1, CAT IV 600V
- EMC: IEC/EN61326-1

**This product conforms to the prescriptions of the European directive on low voltage 2014/35/EU
and to EMC directive 2014/30/EU**

**This product conforms to the prescriptions of the European directive 2011/65/EU (RoHS) and the
European directive 2012/19/EU (WEEE)**