



1. ELECTRICAL SPECIFICATIONS

Accuracy is calculated as [% rdg + (number of dgt) x resolution]. It is referred to 18°C ÷ 28°C with 75%RH

DC Voltage (Autorange)

Range	Resolution	Accuracy	Input impedance	Overload protection
600.0mV	0.01mV	$\pm(1.0\%rdg + 3dgt)$	10M Ω	1000VDC/ACrms
6.000V	0.001V			
60.00V	0.01V			
600.0V	0.1V			
1000V	1V			

AC Voltage TRMS (Autorange)

Range	Resolution	Accuracy	Input impedance	Bandwith	Overload protection
6.000V	0.001V	$\pm(1.0\%rdg + 4dgt)$ (50 ÷ 60Hz)	10M Ω	50 ÷ 400Hz	1000VDC/ACrms
60.00V	0.01V				
600.0V	0.1V	$\pm(3.5\%rdg + 5dgt)$ (61 ÷ 400Hz)			
1000V	1V				

Integrated sensor for AC voltage detection: LED turn on for phase-earth voltage > 100V, 50/60Hz

Resistance and Continuity test (Autorange)

Range	Resolution	Accuracy	Buzzer	Overload protection
600.0 Ω	0.1 Ω	$\pm(1.0\%rdg + 5dgt)$	$\leq 60\Omega$	600VDC/ACrms
6.000k Ω	0.001k Ω			
60.00k Ω	0.01k Ω			
600.0k Ω	0.1k Ω			
6.000M Ω	0.001M Ω	$\pm(2.0\%rdg + 10dgt)$		
60.00M Ω	0.01M Ω			

Test current of continuity test: < 0.35mA

DC Current

Range	Resolution	Accuracy	Overload protection
60.00A	0.01A	$\pm(2.2\%rdg + 10dgt)$	1000AACrms
600.0A	0.1A	$\pm(2.0\%rdg + 8dgt)$	
1000	1A		

AC TRMS Current

Range	Resolution	Accuracy	Bandwith	Overload protection
60.00A	0.01A	$\pm(2.2\%rdg + 12dgt)$	50 ÷ 60Hz	1000Arms
600.0A	0.1A	$\pm(2.2\%rdg + 8dgt)$		
1000	1A			
60.00A	0.01A	$\pm(3.5\%rdg + 12dgt)$	61 ÷ 400Hz	
600.0A	0.1A	$\pm(3.5\%rdg + 8dgt)$		
1000	1A			

PEAK features: response time <10ms ; Accuracy: $\pm(5\%rdg.+10dgt)$



Capacitance (Autorange)

Range	Resolution	Accuracy	Overload protection
40.00nF	0.01nF	$\pm(3.5\%rdg + 40dgt)$	600VACrms
400.0nF	0.1nF	$\pm(2.5\%rdg + 5dgt)$	
4.000 μ F	0.001 μ F		
40.00 μ F	0.01 μ F		
400.0 μ F	0.1 μ F		
4000 μ F	1 μ F	$\pm(5.0\%rdg + 5dgt)$	

Diode test

Feature	Test current	Open voltage
	0.9mA typical	2.8VDC

Frequency with test leads (Autorange)

Range	Resolution	Accuracy	Sensitivity	Overload protection
99.99Hz	0.01Hz	$\pm(1.0\%rdg + 5dgt)$	> 15Vrms	600VDC/ACrms 1000AACrms
999.9Hz	0.1Hz			
9.999kHz	0.001kHz			
60.00kHz	0.01kHz			

Frequency with jaws (Autorange)

Range	Resolution	Accuracy	Sensitivity	Overload protection
99.99Hz	0.01Hz	$\pm(1.0\%rdg + 5dgt)$	$\geq 10A$ (60A) $\geq 50A$ (600A)	600VDC/ACrms 1000AACrms
999.9Hz	0.1Hz			
9.999kHz	0.001kHz			

Duty Cycle (Autorange)

Range	Resolution	Sensitivity	Accuracy
0.5% ÷ 99.0%	0.1%	> 15Vrms	$\pm(1.2\%rdg + 2dgt)$

Pulse width: 100 μ s ÷ 100ms ; Pulse frequency: 5.000Hz ÷ 100.0kHz

Temperature with type K probe (Autorange)

Range	Resolution	Accuracy (*)	Overload protection
-20.0 ÷ 400.0°C	0.1°C	$\pm(2.0\%rdg + 3^\circ C)$	600VDC/ACrms
400 ÷ 760°C	1°C	$\pm(2.0\%rdg + 5^\circ C)$	
-4.0 ÷ 752.0°F	0.1°F	$\pm(2.0\%rdg + 6^\circ F)$	
752 ÷ 1400°F	1°F	$\pm(2.0\%rdg + 9^\circ F)$	

(*) Accuracy of type K probe not considered



2. GENERAL SPECIFICATIONS

Mechanical characteristics

Size:	252(L) x 88(La) x 44(H)mm
Weight (including battery):	442g
Max conductor size:	45mm

Supply

Battery type:	1 battery 9V NEDA 1604 IEC 6F22 JIS 006P.
Low battery indication:	“+ III” is displayed when the battery level is too low.
Battery life:	about 200 hours
AutoPowerOff:	about 15 minutes of idleness

Display

Characteristics:	4 LCD (max 6000 counts), decimal point, unit symbol indication, bargraph and backlight
Sample rate:	2 times/sec
Conversion mode:	TRMS

Climatic conditions

Reference temperature:	18°C ÷ 28°C
Operating temperature:	5 ÷ 40 °C
Operating humidity:	<80%RH
Storage temperature:	-20 ÷ 60 °C
Storage humidity:	<80%RH

Reference standards

Comply with:	IEC/EN 61010-1
Insulation:	double insulation
Pollution:	Level 2
For inside use, max height:	2000m
Installation category:	CAT IV 600V, CAT III 1000V to the ground

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

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energie ist messbar

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