



## 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	±(1.0%rdg + 3dgt)	10MΩ	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	±(1.0%rdg + 4dgt) (50 ÷ 60Hz)	10MΩ	50 ÷ 400Hz	1000VDC/ACrms
60.00V	0.01V				
600.0V	0.1V	±(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
600.0Ω	0.1Ω	±(1.0%rdg + 5dgt)	≤ 60Ω	600VDC/ACrms
6.000kΩ	0.001kΩ			
60.00kΩ	0.01kΩ			
600.0kΩ	0.1kΩ			
6.000MΩ	0.001MΩ	±(2.0%rdg + 10dgt)		
60.00MΩ	0.01MΩ			

Test current of continuity test: < 0.35mA

### DC Current

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

### AC TRMS Current

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

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

**Capacitance (Aurorange)**

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 $\mu$ F	0.001 $\mu$ F		
40.00 $\mu$ F	0.01 $\mu$ F		
400.0 $\mu$ F	0.1 $\mu$ F		
4000 $\mu$ F	1 $\mu$ F	$\pm(5.0\%rdg + 5dgt)$	

**Diode test**

Feature	Test current	Open voltage
	0.9mA typical	2.8VDC

**Frequency with test leads (Aurorange)**

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 (Aurorange)**

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 (Aurorange)**

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

Pulse width: 100 $\mu$ s ÷ 100ms ; Pulse frequency: 5.000Hz ÷ 100.0kHz**Temperature with type K probe (Aurorange)**

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

Dimensions ( L x W x H):	252 x 88 x 44mm
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

Safety:	IEC/EN 61010-1
EMC:	IEC/EN61326-1
Insulation:	double insulation
Pollution level:	2
For inside use, max height:	2000m
Installation category:	CAT IV 600V, CAT III 1000V to the ground

**This 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**