



WENS 20 SERIES

Autoranging Digital Multimeter

WENS 20R

WENS 20T (Temp.)

WENS 20TRMS (Temp. RMS)

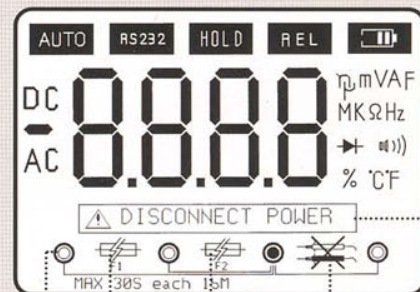


actual size

- ◆ 40/41 RANGE, 4000 Count Autoranging DMM
- ◆ Widest(71 × 49mm, 2.8 × 1.9"), High Visibility Contrast LCD in its class
- ◆ Safety design compiled to **UL** and **CE**
- ◆ Overload Protection on All Ranges
- ◆ Auto Power Off(30 minutes)
- ◆ Relative Mode
- ◆ Auto/Manual Range Selection Mode
- ◆ Data Hold Mode
- ◆ Temperature(°C or °F) with 0.1° resolution
0.1° measurement (WENS 20T WENS 20TRMS)
- ◆ True RMS measurement (WENS 20TRMS)
- ◆ High Accuracy, wide Bandage Frequency measurement(0.5Hz to 10MHz. 0.001Hz resolution 0.1% accuracy)
- ◆ Duty Cycle(%) Display at Hz mode

Safety Warning LCD Annunciator

protect End-user misuse, return,
easy Do-it-yourself repair



Displayed at
Ohm, Buzzer,
Capacitance
diode range

Wrong Position Test Lead

F2 Fuse open

F1 Fuse open

Display the 2 proper
Input holes(Test Lead)
location at each measuring range

SPECIFICATIONS



DC Voltage

Range	Resolution	Accuracy	Impedance	Overload Protection
400mV	0.1 mV	$\pm(0.3\%+5\text{dgt})$	100M Ω	1000V DC or AC peak within 10 seconds
4 V	1 mV	$\pm(0.1\%+5\text{dgt})$	10M Ω	
40 V	10 mV			
400 V	100 mV			
1000 V	1 V	$\pm(0.5\%+5\text{dgt})$		

WENS 20R/20T : Basic accuracy - $\pm 0.3\%$

AC Voltage

Range	Resolution	Accuracy	Input Impedance	Overload Protection
		50Hz~500Hz		
50-400mV	0.1 mV	1.5%+5digits	100M Ω	1000V DC or AC peak within 10 seconds
4 V	1 mV	1.0%+5digits	10M Ω	
40 V	10 mV	1.0%+5digits		
400 V	100 mV	1.0%+5digits		
700 V	1 V	1.0%+5digits		

True RMS (WENS 20TRMS) above accuracy in 40Hz to 1KHz
N. S. in 1KHz to 10KHz

AC Current

Range	Resolution	Accuracy	Overload Protection
		50Hz~500Hz	
400uA	0.1 μA	$\pm(1.5\%+10\text{dgt})$	250 V / 500 mA Fused.
4000uA	1 μV		
40mA	10 μV		
400mA	100 μV		
20 A	1 mA	$\pm(2.0\%+10\text{dgt})$	250 V / 20A fused

True RMS (WENS 20TRMS) above accuracy in 40Hz to 1KHz
N. S. in 1KHz to 10KHz

DC Current

Range	Resolution	Accuracy	Overload Protection
400uA	0.1 μA	$\pm(1.2\%+10\text{dgt})$	250 V / 500 mA Fused.
4000uA	1 μV		
40mA	10 μV		
400mA	100 μV		
20 A	10 mA	$\pm(2.0\%+10\text{dgt})$	250 V / 20A fused

Resistance

Range	Resolution	Accuracy	Overload Protection
400 Ω	0.1 Ω	$\pm(0.5\%+5\text{dgt})$	250 V DC or AC Peak within 10 seconds.
4K Ω	1 Ω		
40K Ω	10 Ω		
400K Ω	100 Ω		
4M Ω	1 K Ω	$\pm(1\%+5\text{dgt})$	
40M Ω	10 K Ω		

Continuity Test

- BELOW 60 Ω

Diode Test

Range	Resolution	Accuracy	Open Circuit Voltage
Diode	10 mV	$\pm(2\%rdg+5\text{digits})$	MAX 5.0 V

Capacitance

Range	Resolution	Accuracy
40 nF	10 pF	$\pm(2\% rdg + 10 \text{ digits})$
400 nF	100 pF	
4 uF	1 nF	
40 μF	10 nF	
100 μF	100 nF	

Frequency

Range	Resolution	Accuracy
500 mHz	0.1 mHz	$\pm(0.1\% rdg + 2 \text{ digits})$
5 Hz	0.001 Hz	
50 Hz	0.01 Hz	
500 Hz	0.1 Hz	
5 KHz	1 Hz	
50 KHz	10 Hz	
500 KHz	100 Hz	
5 MHz	1 KHz	
10 MHz	10 KHz	

- Duty Cycle : 0.1% to 99.9% display.

Temperature (WENS 20T, WENS 20TRMS only)

with K-Type thermocouple wire
0.1°(degree) display upto 400.0°C/°F

Range : 0°F to 2000°F (-20°C to 1370°C)
Accuracy : $\pm(3^\circ + 5 \text{ digit})$ up to 212°F (100°C)
 $\pm 3\%$ over 212°F (100°C)

GENERAL

Display	4000 count 3 $\frac{3}{4}$ digit LCD
Overrange Indication	Most significant digit is flickered
Low Battery	" $\square\square\square$ " displayed
Data Hold	"HOLD" displayed
Measurement Rate	Digit: 3 Times/sec
Operating Temperature	0°C to 50°C, 0-70% Relative Humidity
Storage Temperature	-20°C to 60°C, 0-80% RH with battery removed
Power	Single Standard 9 Volt battery, NEDA 1604, JIS 006P, IEC 6F22
Dimension, Weight	92W \times 192L \times 35H mm, 350g(meter only) 3.6"W \times 7.6"L \times 1.4"H inch, 0.8lbs(meter only)

Specifications and design subject to change without notice.

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ISO 9001 CERTIFIED

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