



Product Datasheet

English

Stock No: 2207280,2207296

True RMS Multimeter with VFD Measurement 400A AC TRMS Clamp Meter




RS-915T

1. Introduction

This meter measures AC/DC Voltage, AC/DC Current, Resistance, Diode Test, Continuity, capacitance, frequency (electrical & electronic), duty cycle, temperature. Proper use and care of this meter will provide many years of reliable service.

2. General Specifications

Insulation	Class 2, Double Insulation
Diode Test	Test current 1mA max., open circuit voltage of
Continuity Test	Audible signal if the resistance is $<50\Omega$
Low Battery	"  is displayed
Display	6000 count LCD
Over Range	"OL" is displayed
Polarity	Minus symbol "-" is displayed for negative
Measurement	3 readings per second, nominal
Auto Power Off	After approx. 15 minutes
Input Impedance	$>10M\Omega$ AC and DC Voltage
AC Response	True RMS Responding
AC Bandwidth	50 to 400Hz
Batteries	Two AAA 1.5V batteries
Fuse	10A Ranges: 10A/1000V fast acting Fuse
Operating	32°F to 104°F (0°C to 40°C) at $<70\%$ relative
Storage	14°F to 122°F (-10°C to 50°C) at $<80\%$ relative
Operating Altitude	2000 meters
Dimensions/	144 x 71 x 27.2mm/209g (includes holster)
Safety	Complies with UL 61010-1 v.3 for measurement Category III 600V, Pollution

3. Specifications

Function	Range		Accuracy
DC Voltage	60mV	0.01mV	±(0.8% reading+3 digits)
	600mV	0.1mV	
	6V	0.001V	
	60V	0.01V	
	600V	0.1V	
AC Voltage	45Hz to		±(1.2% reading+8 digits)
	60mV	0.01mV	
	600mV	0.1mV	
	6V	0.001V	
	60V	0.01V	
VFD	45Hz to		±(3% reading+5 digits)
	100V~600V	0.1V	

All AC voltage ranges are specified from 5% of range to 100% of

DC Current	6A	0.001A	±(1.5% reading+5 digits)
	10A	0.01A	
AC Current	45Hz to		±(2% reading+5 digits)
	6A	0.001A	
	10A	0.01A	

All AC Current ranges are specified from 5% of range to 100% of

NOTE: Accuracy is stated at 65°F to 83°F (18°C to 28°C) and less than 75% RH.


Function	Range	Resolution	Accuracy
Resistance	600Ω	0.1Ω	±(1.5% reading + 5 digits)
	6kΩ	0.001kΩ	
	60kΩ	0.01kΩ	
	600kΩ	0.1kΩ	
	6MΩ	0.001MΩ	±(2.5% reading + 5 digits)
	60MΩ	0.01MΩ	
Capacitance	60nF	0.01nF	±(2.5% reading + 5 digits)
	600nF	0.1nF	
	6μF	0.001μF	±(2.5% reading + 5 digits)
	60μF	0.01μF	
	600μF	0.1μF	±(3% reading + 5 digits)
	6mF	0.001mF	
Frequency (electronic)	9.999Hz	0.001Hz	±(1.0% +5reading)
	99.99Hz	0.01Hz	
	999.9Hz	0.1Hz	
	9.999kHz	0.001KHz	
	99.99kHz	0.01KHz	
	999.9KHz	0.1KHz	
	9.999MHz	0.001MHz	
Frequency (electric)	0.1 to 99.9%	0.1%	±(1.2% reading + 2 digits)
Temperature	-4°F to	1°F	±(1.5% + 9°F)
	-20°C to	1°C	±(1.5% + 5°C)

Note: Accuracy specifications consist of two elements:

- (% reading) – This is the accuracy of the measurement circuit.
- (+ digits) – This is the accuracy of the analog to digital converter.

RS-9180

1. General Specifications

Clamp Jaw	1.2"(30mm) approx
Display	3-3/4 digits (4000 Counts) backlit LCD
Low Battery	"  " is displayed
Over-Range	"OL" displayed
Measurement	3 readings per second, nominal
Temperature	Type K thermocouple
Input Impedance	10M Ω (VDC and VAC)
AC Response	True RMS (AAC and VAC)
ACV Bandwidth	2KHz
Operating	5°C to 40°C (41°F to 104°F)
Storage	-20°C to 60°C (-4°F to 140°F)
Operating Humidity	Max 80% up to 31°C (87°F) decreasing linearly to 50% at 40°C(104°F)
Storage Humidity	<80%
Operating Altitude	7000ft. (2000meters) maximum
Battery	3x1.5V AAA Batteries
Battery Life	~30h (Backlight ON), ~100h (Backlight OFF)
Auto Power Off	After approx. 15 minutes
Safety	For indoor use and in accordance with the requirements for double insulation to IEC1010-1 (2001): EN61010-2-030 EN61010-2-032 EN61010-2-033 Overvoltage category

3. Specifications

Function	Range		Accuracy
AC True RMS	40.00A	10mA	$\pm 2.0\%$ of rdg ± 8 digits
	400.0A	100mA	$\pm 2.5\%$ of rdg ± 8 digits

Over rang protection: Maximum input 400A;

Accuracy specified from 5% to 100% of the measuring range;

Frequency response: 50Hz to 60Hz True RMS;

Inrush current maximum input: 400A; Inrush current sensitivity: $>2A$

AC True RMS Voltage (with VFD)	4.000V	1mV	$\pm 1.2\%$ of rdg ± 5 digits
	40.00V	10mV	
	400.0V	100mV	$\pm 1.5\%$ of rdg ± 5 digits
	1000V	1V	

Variable frequency Drive Test AC voltage rang: 100V-600V.

AC voltage bandwidth: 50 to 1000Hz (sine) 50/60 (all wave)

Accuracy specified from 5% to 100% of the measuring range

Maximum Input: 1000V ac rms. PEAK Maximum Input: 1000V

DC Voltage	4.000V	1mV	$\pm 1.0\%$ of rdg ± 3 digits
	40.00V	10mV	
	400.0V	100mV	$\pm 1.2\%$ of rdg ± 3 digits
	1000V	1V	

Maximum Input: 1000V dc

Resistance	400.0 Ω	0.1 Ω	$\pm 1\%$ of rdg ± 4 digits
	4.000k Ω	1 Ω	$\pm 1.5\%$ of rdg ± 2 digits
	40.00k Ω	10 Ω	
	400.0k Ω	100 Ω	$\pm 2.0\%$ of rdg ± 5 digits
	4.000M Ω	1k Ω	
	40.00M Ω	10k Ω	$\pm 3\%$ of rdg ± 8 digits

Input Protection: 300V dc or 300V ac rms.

Function	Range	Resolution	Accuracy
Capacitance (Auto-ranging)	99.99nF*	0.01nF	±4.5% of rdg ± 20digits
	999.9nF	0.1nF	±3.0% of rdg ±5digits
	9.999µF	0.001µF	
	99.99µF	0.01µF	
	999.9µF	0.1µF	
	9.999mF	0.001mF	±5% of rdg ± 5digits
99.99mF	0.01mF		
Input Protection: 300V dc or 300V ac rms. * < 99.99nF (No			

Frequency with test leads(AC	10Hz to 100kHz	±1.0% of rdg ± 5digits
Input Protection: 1000V AC rms ; Sensitivity: >15V AC rms		
Frequency (AC	45Hz to 1kHz	±1.0% of rdg ± 5digits
Sensitivity: >20A		

Duty Cycle	20.0%~80.0	0.1	±1.2% of rdg ±10digits
Temperature	-	0.1°C/°F	±3% of rdg + 3°C
	-4°F~1832°F	0.1°C/°F	±3% of rdg + 3°C
Sensor: Type K Thermocouple; Input Protection: 300V dc or 300V ac			

Function	Testing Condition	Reading
Diode	Forward DCA is approx.1mA, open	Forward voltage drop of Diode
Continuity	Test current MAX. 1.5mA	Buzzer makes a long sound, While resistance is less
Input Protection: 300V dc or 300V ac rms.		