

FEATURES

- 400 A AC Current Measurement
- 2000 Counts LCD display
- Auto power off
- Low battery indicator
- Non-contact voltage detection
- Resistance measurement, test measurement, Continuity and diode check
- Overvoltage Category III 600 V

RS PRO Clamp Meter- RS380 Multifunction Clamp Meter

RS Stock No.: 123-1935



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

RS PRO RS380 Compact AC Auto-ranging Clamp Meter

A clamp meter is an electrical test tool that combines a basic digital multimeter with a current sensor. Clamps measure current such as AC current, AC and DC voltage, resistance, continuity, and, with some models, DC current, capacitance, temperature, frequency and more. Due to the hinged jaw, this tool allows the user to clamp the jaws around a wire, cable or other conductor at any point in an electrical system, then measure the current without disconnecting it.

General Specifications

Product Range	Clamp Meter
Model Number	RS380
Clamp Meter Type	Multifunction Clamp
Functions Measured	AC Current, AC Voltage, Continuity, DC Voltage, Diode Test, Resistance, Temperature
Display Type	LCD
Number of Display Digits	2000 LCD display counts
True RMS	Yes
Non-Contact Voltage Detector	Yes
Data Hold	Yes
Auto power OFF	Yes
Applications	Commercial/ Residential electricians

Measurement

Parameter	Range	Accuracy	Resolution
Absolute Current (AC)	400A ac	$\pm(2.5\% \text{ rdg} + 5\text{dgts})$	10mA
Absolute Voltage (AC)	600V ac	$\pm(1.5\% \text{ rdg} + 8\text{dgts})$	100 μ V
Absolute Voltage (DC)	600V dc	$\pm(1.5\% \text{ rdg} + 2\text{dgts})$	100 μ V
Continuity Threshold	Threshold <150 Ω ; Test current < 0.5mA		
Diode Test	Test current of 0.3mA typical Open circuit voltage 1.5V DC typical		
Absolute Resistance	20M Ω	$\pm 1\% \pm 4 \text{ Digits}$	100m Ω
Absolute Temperature	(- 20.0 $^{\circ}$ C to 760.0 $^{\circ}$ C)	$\pm(3.0\% \pm 5^{\circ}\text{C})$	1 $^{\circ}$ C

Electrical Specifications

Power Source	Battery
Battery Type	AAA
Safety Category Level and Voltage	CAT III 600 V

Mechanical Specifications

Clamping Size	Opening 1.2" (30mm) approx
Jaw Capacity (Busbars)	23mm
Dimensions	82 x 40 x 230mm
Width	40mm
Length	82mm
Height	230mm
Weight	230g

Operation Environment Specifications

Operating Altitude	7000ft. (2000meters) maximum
Storage Humidity	<80%
Operating Temperature Range	41 to 104°F (5 to 40°C)
Storage Temperature Range	-4 to 140°F (-20 to 60°C)

Approvals

Declarations	RoHS Certificate of Compliance
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Accessories Includes

Item Name	Qty
Test leads	1
Carrying case	1
temperature probe	1
AAA 1.5 V batteries	2
user manual	1

Similar Products

Stock No.	RS# 123-1984	RS# 123-3222	RS#123-3229	RS# 123-3233
Model Number	RS330	ICM136R	ICM135R	ICMA7-4
Clamp Meter Type	AC/DC Clamp Meter	Multifunction Clamp	Multifunction Clamp	Multifunction Clamp
Clamping Diameter	Opening 0.9" (23mm) approx			
Functions Measured	AC Current, AC Voltage, Continuity, DC Voltage, Diode Test, Resistance	AC Current, AC Voltage, Continuity, DC Current, DC Voltage, Diode Test, Frequency, Resistance	AC Current, AC Voltage, Continuity, DC Voltage, Diode Test, Frequency, Resistance	AC Current, AC Voltage, Continuity, DC Voltage, Diode Test, Resistance

Display Type	LCD	LCD	LCD	
Sampling Rate		1.5 times/sec	1.5 times/sec	2.5 times/sec
Absolute Current (AC)	400A ac	600A ac	600A ac	200A ac
Absolute Current (DC)	600V dc	600A dc		
Absolute Voltage (AC)	600V ac	600V ac	600V ac	600V ac
Absolute Voltage (DC)	600V dc	600V dc	600V dc	600V dc
Continuity Threshold	Threshold <120Ω; Test current < 1mA			
Diode Test	Test current of 0.3mA typical; Open circuit voltage 1.5V DC typical.	Yes	Yes	Yes
Frequency Range			20Hz~400Hz	
Temperature coefficient			0.2×(spec. Acc ' y)/°C <18°C, >28°C	0.2 x (Specified accuracy) / °C, < 18°C, > 28°C

SPECIFICATIONS

Function	Range	Accuracy (% of reading+ digits)	Resolution
DC Voltage	200 mV	± (1.5% + 2d)	0.1mV
	2V	± (1.5% + 2d)	1mV
	20V	± (1.5% + 2d)	10mV
	200V	± (1.5% + 2d)	100 mV
	600V	± (2% + 2d)	1V

Input Impedance:10MΩ

Over range protection:600V

Function	Range	Accuracy (% of reading+ digits)	Resolution
AC Voltage	200mV	$\pm (1.5\% + 10d)$	0.1mV
	2V	$\pm (1.5\% + 8d)$	1mV
	20V	$\pm (1.5\% + 8d)$	10mV
	200V	$\pm (1.5\% + 8d)$	100 mV
	600V	$\pm (2.5\% + 8d)$	1V

Input Impedance: 10M Ω

Over range protection:600V

Frequency Response:50Hz~400Hz

Function	Range	Accuracy (% of reading+ digits)	Resolution
AC Current	20A	$\pm (2.5\% + 5d)$	10mA
	200A	$\pm (2.5\% + 5d)$	100mA
	400A	$\pm (3\% + 5d)$	1A

Over range protection: Maximum input 400A

Frequency Response:50Hz~60Hz

Function	Range	Accuracy (% of reading+ digits)	Resolution
Resistance	200 Ω	$\pm (1.0\% + 4d)$	0.1 Ω
	2k Ω	$\pm (1.5\% + 4d)$	1 Ω
	20k Ω	$\pm (1.5\% + 4d)$	10 Ω
	200k Ω	$\pm (1.5\% + 4d)$	100 Ω
	2M Ω	$\pm (2.5\% + 4d)$	1k
	20M Ω	$\pm (3.5\% + 4d)$	10k

Over range protection:250V rms


Function	Range	Accuracy (% of reading+ digits)	Resolution
Temperature	(-4 $^{\circ}$ F to 1400 $^{\circ}$ F)	$\pm(3\% \pm 8^{\circ}$ F)	1 $^{\circ}$ F
	(-20.0 $^{\circ}$ C to 760.0 $^{\circ}$ C)	$\pm(3.0\% \pm 5^{\circ}$ C)	1 $^{\circ}$ C

Sensor: K Type banana plug

Function	Testing Condition	Reading
Diode	Forward DCA is approx.0.3mA,backward Voltage is approx. 1.5V	Forward voltage drop of Diode
Continuity	Open voltage is approx.0.5V	Buzzer makes a long sound, While resistance is less than(150Ω)

Over range protection:250V rms

General Specifications

Clamp size	Opening 1.2" (30mm) approx
Diode Test	Test current of 0.3mA typical Open circuit voltage 1.5V DC typical
Continuity Check	Threshold <150 Ω ; Test current < 0.5mA
Low Battery Indication	"  " is displayed
Overrange Indication	"OL"" is displayed
Measurements Rate	2 per second, nominal
Input Impedance	10M Ω (VDC and VAC)
Display	2000 counts LCD
AC Current	50-60Hz (AAC)
AC Voltage bandwidth	50-60Hz (VAC)
Operating Temperature	41 to 104°F (5 to 40°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Operating Humidity	Max 80% up to 87°F (31°C) decreasing linearly to 50% at 104°F(40°C)

Storage Humidity	<80%
Operating Altitude	7000ft. (2000meters) maximum
Over voltage	Category III 600V
Battery	2 x 1.5V AAA Batteries
Auto OFF	Approx. 15 minutes
Dimensions/Weight	197x70x40mm/183g
Safety	Indoor use only Pollution Degree 2 Installation Category III

Accessories:

Test leads, gift box with carrying case, Temperature probe, User manual and Two "AAA" 1.5V batteries.