

FEATURES

- 4000 Count digital display
- Backlit, large-scale display
- Analogue bargraph 43 segments
- True RMS reading on AC mode
- AC 1000 A capability
- AC 750 V capability
- DC 1000 V capability
- 400 Ω resistance capability
- Continuity beeper
- Display hold
- Peak hold (10 Ms)
- Min/Max function
- Auto power off
- Complies with CAT IV 600 V / CAT III 1000 V

RS PRO Clamp Meter- ICM133R Multifunction Clamp Meter

RS Stock No.: 123-3225



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 ICM136R True RMS Clamp meter

From the trusted RS PRO brand, this ICM133R clamp meter has true RMS reading to ensure accurate current measurement. It utilises Hall Effect technology and features nickel steel alloy jaws for precise measurement of ac and dc current up to 1000 A.

General Specifications

Product Range	Clamp Meter
Model Number	ICM133R
Clamp Meter Type	Multifunction Clamp
Functions Measured	AC Current, AC Voltage, Continuity, DC Voltage, Diode Test, Frequency, Resistance
Display Type	LCD
Sampling Rate	1.5 times/sec
Overload Protection	Yes
True RMS	Yes
Data Hold	Yes
Auto power OFF	Yes
Temperature coefficient	$0.2 \times (\text{spec. Acc}' y) / ^\circ\text{C} < 18^\circ\text{C}, > 28^\circ\text{C}$
Applications	Commercial/ Residential electricians

Measurement

Parameter	Range	Accuracy	Resolution
Absolute Current (AC)	1kA ac	$\pm(2.5\% \text{ rdg} + 7\text{dgts})$	
Absolute Voltage (AC)	750V ac	$\pm(1\% \text{ rdg} + 5\text{dgts})$	
Absolute Voltage (DC)	1000V dc	$\pm(0.7\% \text{ rdg} + 2\text{dgts})$	
Frequency	20Hz~400Hz	$\pm(0.1\%+2\text{dgt})$ at 5V rms	1Hz
Absolute Resistance	400.0 Ω	$\pm(1\% + 3 \text{ digits})$	100m Ω

Electrical Specifications

Power Source	Battery
Battery Type	IEC 6F22, NEDA 1604, 9V
Battery Life	300 h
Safety Category Level and Voltage	CAT III, CAT IV , 600 V, 1000 V

Mechanical Specifications

Jaw Capacity (Busbars)	51mm
Maximum Conductor Size	51 (Dia.)mm
Dimensions	90 x 51 x 275mm
Width	51mm
Length	90mm
Height	275mm
Weight	235g

Operation Environment Specifications

Operating Temperature Range	0°C~30°C(≅80% R.H.), 30°C~40°C(≅75% R.H.), 40°C~50°C(≅45% R.H.)
Storage Temperature Range	-20°C~60°C

Approvals

Compliance/Certifications	IEC 61010-1
Declarations	RoHS Certificate of Compliance

Accessories Includes

Item Name	Qty
Battery (installed)	1
Test leads	1
Carrying case	1
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:(All at 23°C±5°C, ≤80% R.H.)

DC/AC Voltage

Range	Input Impedance	Overload Protection	Accuracy
0V~400V, 400V~1000V DC	≥1MΩ	1000V DC or AC Peak	±(0.7%+2dgt)
0V~400V, 400V~750V AC	1MΩ// < 100pF	750V rms	±(1%+5dgt) 50Hz~500Hz

Resolution: 100mV

Conversion Type: Average sensing True-RMS indicating

AC Current

Range	Accuracy	
	50Hz~60Hz	61Hz~400Hz
0A~60A	±(1.9%+7dgt)	±(2.5%+7dgt)
60.1A~400A	±(1.9%+5dgt)	
400.1A~600A	±(1.9%+5dgt)	
400.1A~1000A	Unspecified	

Resolution: 0.1A

Overload Protection: 1000A rms

Conversion Type: Average sensing True-RMS indicating

AC Current

Range	Accuracy	
	50Hz~60Hz	61Hz~400Hz
0A~60A	$\pm(1.9\%+7\text{dgt})$	$\pm(2.5\%+7\text{dgt})$
60.1A~400A	$\pm(1.9\%+5\text{dgt})$	
400.1A~600A	$\pm(1.9\%+5\text{dgt})$	
400.1A~1000A	Unspecified	

Resolution: 0.1A

Overload Protection: 1000A rms

Conversion Type: Average sensing True-RMS indicating

Resistance& Continuity

Range	Accuracy
400.0 Ω	$\pm(1\%+3\text{dgt})$

Overload Protection: 600V rms

Open Circuit Voltage: 3.3V max

Resolution: 0.1 Ω

Continuity Tester: <30 Ω approx.

Indicator: 2KHz tone buzzer

Frequency


Range	Accuracy	Resolution
20Hz~400Hz	$\pm(0.1\%+2\text{dgt})$ at 5V rms max	1Hz

Sensitivity: 3A rms fpr ACA (A~)(>400Hz Unspecified)

3V rms to 110V rms for ACV(V~)

Overload Protection: **AC/DC 1000A rms**

General

Sampling Rate:	1.5 times/sec
Overload Indication:	OL is displayed
Low Battery Indication:	
Auto Power Off:	Approx. 30 minutes after last operation
Operating Temperature:	0°C~30°C(≤80% R.H.), 30°C~40°C(≤75% R.H.), 40°C~50°C(≤45% R.H.)
Storage Temperature:	-20°C~60°C
Temperature Coefficient:	0.2×(spec. Acc'y)/°C <18°C, >28°C
Shock Proof:	4 feet drops
Safety:	IEC 61010-1: CAT.III 600V, CAT.II 1000V
Maximum Conduct Size:	51mm dia.
Maximum Jaw Opening:	53mm dia.
Power Requirement:	Single 9V battery (NEDA 1604 or IEC 6F22)
Battery Life:	200 hours(Alkaline)
Size:	90mm(W)×275mm(L)×51mm(H)
Weight:	420g with holster
Accessories:	Battery (installed), Test Leads, Carrying Case and User Manual