

FEATURES

- Large 3 digits LCD
- Accurate DC/AC digital clamp meter for current
- DC 2500 A, AC 2100 A (True RMS)
- Auto-range for A, V, and Ω
- One-touch zero for DCA adjustment
- Easy single rotary switch
- Continuity with buzzer
- Max/Min, Data Hold functions
- Conductor size, cable 55 mm (approximately) and busbar 65 x 24 mm
- Dimensions 271 x 112 x 46 mm
- Weight 647 g (including battery)

RS PRO Clamp Meter- ICM2000N Multifunction Clamp Meter

RS Stock No.: 123-2206



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 ICM 2000N AC/DC Clamp meter

From the trusted RS PRO, the ICM 2000N is a great value clampmeter which uses Hall effect technology for precise measurement of ac and dc current.

General Specifications

Product Range	Clamp Meter
Model Number	ICM2000N
Clamp Meter Type	Multifunction Clamp
Functions Measured	AC Current, AC Voltage, DC Current, DC Voltage, Frequency, Resistance
Display Type	LCD
Overload Protection	Yes
True RMS	Yes
Auto Range Function	Yes
Data Hold	Yes
Applications	Commercial/ Residential electricians

Measurement

Parameter	Range	Accuracy	Resolution
Absolute Current (AC)	2.1kA ac	$\pm(1.5\% \text{ rdg} + 5\text{dgts})$	100mA
Absolute Current (DC)	2.5kA dc		100mA
Absolute Voltage (AC)	600V ac	$\pm(1.5\% \text{ rdg} + 5\text{dgts})$	100 μ V
Absolute Voltage (DC)	600V dc	$\pm(1.5\% \text{ rdg} + 3\text{dgts})$	100 μ V
Diode Test	1.999V	$\pm 2.5\% \pm 5\text{dgts}$	0.001V
Frequency	1Hz - 400KHz	$\pm 0.5\% \pm 2\text{dgts}$	0.001Hz - 100Hz
Absolute Resistance	40M Ω	$\pm 1.5\% \pm 3 \text{ Digits}$	100m Ω

Electrical Specifications

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

Mechanical Specifications

Jaw Capacity (Busbars)	55mm
Maximum Conductor Size	55mm
Dimensions	112 x 46 x 271mm
Width	46mm
Length	112mm
Height	271mm
Weight	647g

Operation Environment Specifications

Operating Temperature Range	4 °C to 50 °C, less than 85% relative
Storage Temperature Range	-20 °C to 60 °C, less than 75% relative

Approvals

Declarations	RoHS Certificate of Compliance
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Accessories Includes

Item Name	Item Description	Qty
Test leads		1
Carrying bag		1
User manual		1
9 V battery		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 :

DC Current:

Range	Resolution	Accuracy (of rdg)	Overload Protection
400A	0.1A	±1.5%±3dpts	DC 3000A
0 – 2000A	1A	±1.5%±3dpts	
2000 – 2500A	1A	±2.0%±3dpts	

AC Current: (True RMS, Crest Factor < 4)

Range	Resolution	Accuracy (of rdg)		Overload Protection
		50/60 Hz	40 - 1KHz	
400A	0.1A	±1.5%±5dpts	±2.0%±5dpts	AC 3000A
0 – 1000A	1A	±2.0%±5dpts	±2.5%±5dpts	
1000 – 2100A	1A	±2.5%±5dpts	±3.0%±5dpts	

Current Analog Output:

Range	Output	Accuracy	Overload Protection
0 - 400A	1mV/A	±2.5%±0.5A	600V AC
400 - 2100A	1mV/A	±2.5%± 5A	

DC Voltage: (Auto range & Manual, Overload Protection 800VAC for all ranges)

Range	Resolution	Accuracy (of rdg)	Input Impedance
400mV	0.1mV	±1.5%±3dpts	10MΩ
4V	0.001V		5MΩ
40V	0.01V		5MΩ
400V	0.1V		5MΩ
600V	1V		5MΩ

AC Voltage: (TRMS, Crest Factor<4, Auto range & Manual, Overload Protection 800VAC)

Range	Resolution	Accuracy (of rdg)		Input Impedance
		50/60 Hz	40 - 1KHz	
400mV	0.1mV	_____1	_____1	_____1
4V	0.001V	±1.5%±5dpts	±2.0%±5dpts	5MΩ
40V	0.01V			
400V	0.1V			
600V	1V			

¹ Though 400mVAC can be selected by RANGE key, it is not designed to measured AC mV. So no accuracy is listed for AC 400mV range.

Resistance Ω : (Auto range & Manual, Open Circuit Voltage $\leq 0.5V$)

Range	Resolution	Accuracy (of rdg)	Overload Protection
400 Ω	0.1 Ω	$\pm 1.5\% \pm 3\text{dgt}$ s	600VAC
4K Ω	1 Ω		
40K Ω	10 Ω		
400K Ω	100 Ω		
4M Ω	1K Ω		
40M Ω	10K Ω		

Resistance (Ω) and Continuity: (open voltage 0.4V)


Range	Resolution	Accuracy	Beeping	OL Protection
40-400 Ω	0.1 Ω	$\pm 1.0\% \text{rdg} \pm 2\text{dgt}$ s	< 40.0 Ω (approx.)	AC 600V

Diode Test:

Range	Resolution	Accuracy	Overload Protection
1.999V	0.001V	$\pm 2.5\% \pm 5\text{dgt}$ s	600V AC

Frequency: (Hz, Overload Protection 600VAC, Sensitivity selected by RANGE button)

Range	Resolution	Accuracy	Sensitivity
1Hz - 400KHz	0.001Hz - 100Hz	$\pm 0.5\% \pm 2\text{dgt}$ s	10V

Conductor Size:	Cable $\phi 55\text{mm}$. (approx.), Bus Bar 65 x 24mm
Battery Type:	9V
Display:	3 3/4 LCD with 40 seg. bargraph
Range Selection:	Auto and manual
Sampling Time:	3 times/sec. (display); 30 times/sec. (bargraph)
Overload Indication:	OL
Low battery Indication:	
Power Consumption:	17mA (approx.)
Operating Environment:	4°C to 50°C, less than 85% relative
Storage Environment:	-20°C to 60°C, less than 75% relative
Dimension:	271 x 112 x 46mm
Weight:	647g (battery included)