

FEATURES

- True-RMS reading
- 4000 Count digital display
- Auto-ranging
- Dual hall sensor
- Nickel-Steel alloy jaw mechanism
- AC-DC 300 A
- AC-DC 600 V
- 0.5% basic DC Voltage accuracy
- 1.5% basic AC Voltage accuracy
- 1.0% basic DC A / AC A accuracy
- 0.9% basic Ohms accuracy
- Continuity beeper
- 10 mA resolution
- Auto-Zeroing key for DC Amps
- Data hold function
- MAX hold function
- Auto power off selectable
- 600 V protection in every range
- Up to 22 mm Diameter conductor
- Insulated input jacks
- Hand guard designed
- Power Requirement: Alkaline AAA size 1.5 V x 2

RS PRO Clamp Meter - ICM30R Multifunction Clamp Meter

RS Stock No.: 1233252



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 ICM30R AC-DC Current Clamp Multimeter

From RS PRO, this ICM30R clamp meter is a high performing solution for current measurement. The multifunction clampmeter utilises Hall Effect technology and nickel steel alloy jaws for precise measurement of ac and dc current up to 300 A.

It functions as a multimeter and analyzer with a clamp that is ideal for multifunctions including current and voltage measurements.

Battery-powered for maximum portability, and with a large backlit screen, this current clamp meter is ideal for on-the-go applications in almost any environment.

It is also supplied in a carry case to keep the clampmeter safe and secure during transit.

General Specifications

| | |
|---------------------------------|--|
| Model Number | ICM30R |
| Clamp Meter Type | Multifunction Clamp |
| Display Type | LCD |
| Number of Display Digits | 2000 digit large scale LCD readout |
| Sampling Rate | 2.5 times/sec |
| Overload Protection | Yes 600V rms |
| True RMS | Yes |
| Auto power OFF | Yes Approx. 10 minutes after last operation |
| Temperature coefficient | 0.2×(spec. Acc'y)/ °C <18°C, >28°C |
| Applications | Used for measuring high levels of current in service and maintenance applications. It can also be used when installing electrical equipment. |

Measurement

| Parameter | Range | Accuracy | Resolution |
|------------------------------|--------------|---------------------|------------|
| Absolute Current (AC) | 300A ac | ±(1% rdg + 3dgts) | 10mA |
| Absolute Current (DC) | 300A dc | ±(1% rdg + 2dgts) | 10mA |
| Absolute Voltage (AC) | 600V ac | ±(1.5% rdg + 5dgts) | 100µV |
| Absolute Voltage (DC) | 600V dc | ±(0.5% rdg + 2dgts) | 100µV |
| Diode Test | -3.1V max | | |
| Absolute Resistance | 40MΩ | + 5 Digits; ±2.5% | 1kΩ |
| Absolute Temperature | 0°C to +50°C | | |

Electrical Specifications

| | |
|--|--------------|
| Power Source | Battery |
| Battery Type | AAA |
| Battery Life | 60 h |
| Safety Category Level and Voltage | CAT III 300V |

Mechanical Specifications

| | |
|-------------------------------|-----------------|
| Jaw Capacity (Busbars) | 22mm |
| Maximum Conductor Size | 22 (Dia.)mm |
| Dimensions | 192 x 66 x 27mm |
| Width | 66mm |
| Length | 192mm |
| Height | 27mm |
| Weight | 205g |

Operation Environment Specifications

| | |
|------------------------------------|---|
| Altitude | 2000 Meter |
| Relative Humidity | 0° C ~30° C (\cong 80% R.H.), 30° C ~40° C (\cong 75% R.H.), 40° C ~50° C (\cong 45% R.H.) |
| Operating Temperature Range | 0° C ~30° C (\cong 80% R.H.), 30° C ~40° C (\cong 75% R.H.), 40° C ~50° C (\cong 45% R.H.) |
| Storage Temperature Range | -20 to +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#1233228 | RS#1233230 | RS#1233252 | RS#1233231 |
|--------------------------------|--|---|-----------------------------------|---|
| Model Number | ICM134 | ICM20 | ICM30R | ICM33II |
| Clamp Meter Type | Multifunction Clamp | Current Clamp | Multifunction Clamp | Multifunction Clamp |
| Functions Measured | AC Current, AC Voltage, Capacitance, Continuity, DC Current, DC Voltage, Diode Test, Resistance, Temperature | AC Current, Continuity, Diode Test | | |
| Display Type | LCD | LCD | LCD | LCD |
| Sampling Rate | 1.5 times/sec | 2.5 times/sec | 2.5 times/sec | 4 times/sec |
| Absolute Current (AC) | 600A ac | 400A ac | 300A ac | 600A ac |
| Absolute Current (DC) | 4mA dc | | 300A dc | |
| Absolute Voltage (AC) | 750V ac | | 600V ac | 600V ac |
| Absolute Voltage (DC) | 1000V dc | | 600V dc | |
| Temperature coefficient | 0.2×(spec. Acc'y)/°C 28°C | 0° C ~ 30° C (≅80% RH) 30° C ~ 40° C (≅75% RH) 40° C ~ 50° C (≅45%RH) | 0.2×(spec. Acc'y)/°C <18°C, >28°C | 0° C ~30° C (≅80% R.H.), 30° C ~40° C (≅75% R.H.), 40° C ~50° C (≅45% R.H.) |

Specifications:(All at 23°C±5°C, ≤80% R.H.)

AC Voltage

| Range | Resolution | Accuracy | Over Voltage Protection |
|---------|------------|----------------------------|-------------------------|
| 400.0mV | 100µV | ±(2%+5dgt) 50Hz~60Hz | 600V rms |
| 4.000V | 1mV | ±(1.5%+5dgt) 40Hz~300Hz | |
| 40.00V | 10mV | ±(1.5%+5dgt) 40Hz~500Hz | |
| 400.0V | 100mV | | |
| 600V | 1V | | |

Input Impedance: $\geq 9M\Omega$ // less than 100pF

Conversion Type: Average sensing True RMS indicating

The LCD displays 0 count when the reading $\leq 1mV$

DC Voltage

| Range | Resolution | Accuracy | Over Voltage Protection |
|---------|------------|--------------|-------------------------|
| 400.0mV | 100µV | ±(0.5%+5dgt) | 600V rms |
| 4.000V | 1mV | ±(0.5%+2dgt) | |
| 40.00V | 10mV | | |
| 400.0V | 100mV | | |
| 600V | 1V | | |

Input Impedance: $\geq 9M\Omega$

AC Current

| Range | Resolution | Accuracy | |
|-----------|------------|------------|------------|
| | | 50Hz~60Hz | 40Hz~1KHz |
| 0A~4A | 10mA | ±(1%+5dgt) | ±(2%+7dgt) |
| 4A~40A | 10mA | ±(1%+3dgt) | ±(2%+5dgt) |
| 40A~200A | 100mA | | |
| 200A~300A | 100mA | ±(3%+3dgt) | ±(5%+5dgt) |

Conversion Type: Average sensing True RMS indicating

Overload Protection: 400A rms

DC Current

| Range | Resolution | Accuracy |
|-----------|------------|------------|
| 0A~40A | 10mA | ±(1%+2dgt) |
| 40A~200A | 100mA | |
| 200A~300A | 100mA | ±(2%+2dgt) |

Overload Protection: 400A rms

Resistance

| Range | Resolution | Accuracy |
|---------|------------|--------------|
| 400.0Ω | 100mΩ | ±(1.2%+6dgt) |
| 4.000KΩ | 1Ω | ±(0.9%+3dgt) |
| 40.00KΩ | 10Ω | |
| 400.0KΩ | 100Ω | ±(1.2%+3dgt) |
| 4.000MΩ | 1KΩ | |
| 40.00MΩ | 10KΩ | ±(2.5%+5dgt) |

Overload Protection: 600V rms

Continuity

Continuity Tester: <50Ω approximate

Indicator: 2KHz tone buzzer

Position Error: ±1% of reading

Type of Sensing: Hall effect sensing for AC and DC

General

| | |
|---------------------------------|---|
| Sampling Rate: | 2 times/sec |
| Overload Indication: | "OL" or "-OL" |
| 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 300V, CAT.II 600V |
| Maximum Conduct Size: | 22mm dia. |
| Maximum Jaw Opening: | 25mm dia. |
| Power Requirement: | Two 1.5V Alkaline type AAA batteries |
| Battery Life: | 100 hours(Alkaline) |
| Size: | 66mm(W)×192mm(L)×27mm(H) |
| Weight: | 205g |
| Accessories: | Battery (installed), Test Leads, Carrying Case and User Manual |