

### **FEATURES**

- Backlit 4000 Count LCD display with analogue bar graph
- True RMS Reading on ac mode
- 600 A ac/dc current measurement
- 600 V ac/dc voltage measurement
- Resistance measurement with continuity beeper
- Display hold & peak hold (10 ms)
- Maximum Conduct Size of 35 mm diameter
- Maximum Busbar Size: 40 ' 15 mm
- DCA zeroing key
- Min/max function
- Frequency counter
- Auto power off

# RS PRO Clamp Meter-ICM136R AC/DC Clamp Meter

RS Stock No.: 123-3222



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 ICM 136R 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 600 A.

#### **General Specifications**

| Product Range            | Clamp meter   |
|--------------------------|---|
| Model Number             | ICM136R   |
| Clamp Meter Type         | Multifunction Clamp   |
| Functions Measured       | AC Current, AC Voltage, Continuity, DC Current, DC Voltage, Diode Test, Frequency, Resistance |
| Display Type             | LCD   |
| Number of Display Digits | Backlit 4000 Count  |
| Sampling Rate            | 1.5 times/sec   |
| Overload Protection      | Yes   |
| True RMS                 | Yes   |
| Auto power OFF           | Yes   |
| Temperature coefficient  | 0.2×(spec. Acc'y)/°C <18°C, >28°C   |
| Applications             | Commercial/ Residential electricians  |

#### Measurement

| Parameter             | Range       | Accuracy            | Resolution |
|-----------------------|-------------|---------------------|------------|
| Absolute Current (AC) | 600A ac     | ±(1.9% rdg + 5dgts) | 100mA      |
| Absolute Current (DC) | 600A dc     | ±(1.9% rdg + 5dgts) | 100mA      |
| Absolute Voltage (AC) | 600V ac     | ±(1% rdg + 5dgts)   | 100mV      |
| Absolute Voltage (DC) | 600V dc     | ±(0.7% rdg + 2dgts) | 100mV      |
| Frequency             | 20Hz~400KHz | ±(0.1%+2dgt)        | 1Hz        |
| Absolute Resistance   | 400.0Ω      | ±(1%+3dgt)          | 0.1Ω       |

#### **Electrical Specifications**

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



### **Mechanical Specifications**

| Jaw Capacity (Busbars) | 35mm            |
|------------------------|-----------------|
| Maximum Conductor Size | 35 (Dia.)mm     |
| Dimensions             | 78 x 51 x 235mm |
| Width                  | 51mm            |
| Length                 | 78mm            |
| Height                 | 235mm           |
| Weight                 | 380g            |

### **Operation Environment Specifications**

| Operating Temperature Range | 0° C ~ 30° C (≦80% RH)<br>30° C ~ 40° C (≦75% RH)<br>40° C ~ 50° C (≦45%RH) |
|-----------------------------|---|
| Storage Temperature Range   | -20 to +60°C, 0 to 80% RH (batteries not fitted).                           |

### **Approvals**

| Compliance/Certifications | IEC 61010-1, EN61010           |
|---------------------------|--------------------------------|
| Declarations              | RoHS Certificate of Compliance |

### **Accessories Includes**

| Item Name    | Qty |
|--------------|-----|
| Test leads   | 1   |
| Battery      | 1   |
| Carry case   | 1   |
| Instructions | 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<br>Meter   | Multifunction<br>Clamp  | Multifunction<br>Clamp  | Multifunction Clamp  |
| Clamping Diameter  | Opening 0.9"<br>(23mm) approx  |   |   |  |
| Functions Measured | AC Current, AC<br>Voltage,<br>Continuity, DC<br>Voltage, Diode<br>Test, Resistance | AC Current, AC Voltage, Continuity, DC Current, DC Voltage, Diode Test, Frequency, Resistance | AC Current, AC<br>Voltage,<br>Continuity, DC<br>Voltage, Diode<br>Test,<br>Frequency,<br>Resistance | AC<br>Current, AC<br>Voltage,<br>Continuity, DC<br>Voltage, Diode<br>Test,<br>Resistance |
| Display Type       | LCD  | LCD   | LCD   |  |

# Clamp Meter



| 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<br><120Ω; Test<br>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<br>' y)/℃ <18℃,<br>>28℃ | 0.2 x (Specified accuracy) / °C, < 18°C, > 28°C |

#### DC/AC Voltage

| Range         | Input Impedance | Overload Protection | Accuracy     |
|---------------|-----------------|---------------------|--------------|
| 0V~400V,      | ≥1MΩ            | 600V DC or AC rms   | ±(0.7%+2dgt) |
| 400V~600V DC  | ≥ 11V122        |                     | ±(0.7%+2dgt) |
| 0V~400V,      | 1140// ±100 F   | 6001/               | ±(1%+5dgt)   |
| 400V~600V rms | 1MΩ// < 100pF   | 600V rms            | 50Hz~500Hz   |

Resolution: 100mV

Conversion Type: Average sensing True-RMS indicating

#### **DC/AC Current**

| Range     | DC Accuracy   |
|-----------|---------------|
| 0A~60A    | ±(1.5%+10dgt) |
| 60A~400A  | ±(1.9%+5dgt)  |
| 400A~600A | ±(1.9%+10dgt) |

| Banga     | AC Accuracy  |              |  |
|-----------|--------------|--------------|--|
| Range     | 50Hz~60Hz    | 61Hz~400Hz   |  |
| 0A~60A    | ±(1.9%+7dgt) | ±(2.5%+7dgt) |  |
| 60A~400A  | ±(1.9%+5dgt) | ±(2.5%+5dgt) |  |
| 400A~600A | ±(2.5%+5dgt) | ±(2.9%+5dgt) |  |

Resolution: 0.1A

Overload Protection: 600A rms

Conversion Type: Average sensing True-RMS indicating

#### Resistance & Countinuity

| Range         | Accuracy   |
|---------------|------------|
| $400.0\Omega$ | ±(1%+3dgt) |

Overload Protection: 600V rms

Resolution:  $0.1\Omega$ 

Open Circuit Voltage: 3V max
Continuity Tester: <30Ω approximate

Indicator: 2KHz tone buzzer



# Frequency

| Range       | Accuracy     | Resolution |
|-------------|--------------|------------|
| 20Hz~400KHz | ±(0.1%+2dgt) | 1Hz        |

Sensitivity:2A rms fpr ACA (A~)(>400Hz Unspecified)

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

Overload Protection: AC/DC 600A

### 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℃~60℃  |  |
| Temperature Coefficient: | 0.2×(spec. Acc'y)/°C <18°C, >28°C                       |  |
| Safety:                  | IEC 61010-1: CAT.III 600V, CAT.II 1000V                 |  |
| Maximum Conduct Size:    | 35mm dia.   |  |
| Maximum Jaw Opening:     | 45mm dia.   |  |
| Maximum Busbar Size:     | 40×15mm   |  |
| Power Requirement:       | Single 9V battery (NEDA 1604 or IEC 6F22)               |  |
| Battery Life:            | 200 hours(Alkaline)                                     |  |
| Size:                    | 78mm(W)×235mm(L)×51mm(H)                                |  |
| Weight:                  | 380g with holster                                       |  |
| Accessories:             | Battery (installed), Test Leads, Carrying Case and User |  |
|                          | Manual  |  |