400A Mini DC Clamp Meter

Model DC400
Introduction

Thank you for selecting the Extech Instruments Model DC400 clamp meter that measures up to 400A DC. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service. Please visit our website (www.extech.com) to register the meter and to check for the latest version of this User Guide.

Features

- High Accuracy and Resolution
- Large 4000 count LCD display
- One touch “Auto Zero”
- Data Hold and Auto Power Off functions
- 30mm (1.2”) Jaw diameter

Safety

International Safety Symbols

⚠️ This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.

⚡️ This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present

☐ Double insulation

Safety Notes

- Do not exceed the maximum allowable input range.
- Set the function switch OFF when the device is not in use.
- Remove the battery if the device is to be stored for longer than 60 days.
- Never dispose of batteries in a fire. Batteries may explode or leak.
- Never mix battery types. Always install new batteries of the same type.

Warnings

- Set function switch to the appropriate position before measuring.
- Do not measure current on a circuit whose voltage exceeds 600V.

Cautions

- Improper use of this meter can cause damage, shock, injury or death. Read and understand this user manual before operating the meter.
- Inspect the condition of the meter for any damage before operating the meter. Repair any damage before use.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
Specifications

General Specifications

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<td>3-3/4 digit (4000 count) LCD</td>
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<td>Functions</td>
<td>Amperes DC</td>
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<tr>
<td>Polarity</td>
<td>‘‐’ indicates negative polarity</td>
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<td>Current sensor</td>
<td>Hall effect sensor</td>
</tr>
<tr>
<td>Overload indication</td>
<td>“OL”</td>
</tr>
<tr>
<td>DCA zero adjust</td>
<td>One touch zero button</td>
</tr>
<tr>
<td>Auto Power Off</td>
<td>After approx. 15 minutes</td>
</tr>
<tr>
<td>Display rate</td>
<td>2 updates per second (approx)</td>
</tr>
<tr>
<td>Battery</td>
<td>One 9V Battery</td>
</tr>
<tr>
<td>Operating temp.</td>
<td>-10°C to 50°C (4°F to 122°F)</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>&lt; 85% RH</td>
</tr>
<tr>
<td>Power consumption</td>
<td>14mA (typical)</td>
</tr>
<tr>
<td>Weight</td>
<td>290g (10.3 oz.) including battery</td>
</tr>
<tr>
<td>Dimensions</td>
<td>208 x 43 x 30mm (8.2 x 1.7 x 1.2”) (HxWxD)</td>
</tr>
<tr>
<td>Jaw opening</td>
<td>30mm (1.2”)</td>
</tr>
<tr>
<td>Safety rating</td>
<td>IEC 1010 Category II 600V</td>
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Range Specifications

<table>
<thead>
<tr>
<th>Function</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy (% of reading)</th>
<th>Overload protect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Current</td>
<td>40.00A</td>
<td>10mA</td>
<td>± (3.5% + 3digits)</td>
<td>400A DC</td>
</tr>
<tr>
<td></td>
<td>400.0A</td>
<td>100mA</td>
<td></td>
<td></td>
</tr>
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Description

1. Current sensing jaw
2. Measurement trigger
3. Function switch
4. Data Hold button
5. One-touch DCA zero button
6. LCD Display
Operation

DC Current Measurements

1. Set the Function switch to the 40A or 400A DC range.
2. With no conductor in the jaws, press the ZERO button to null the meter display.
3. Press the Trigger to open the current sense Jaw.
4. Fully enclose one conductor to be measured. Do not allow a gap between the two halves of the jaw.
5. Read the DCA value on the display.

Data Hold

To freeze the current reading on the LCD, press the HOLD button. To release the Data Hold function and return the meter to normal operation, press the HOLD button again.

Maintenance

Battery Replacement

1. When the low battery symbol appears on the LCD the battery must be replaced.
2. Remove the orange rubberized cover.
3. Remove the battery compartment screw.
4. Lift off the battery compartment cover and replace the 9V battery.
5. Replace compartment cover and secure the screw.

Never dispose of used batteries or rechargeable batteries in household waste. As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold.

Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

Cleaning

Use only a dry cloth to clean the meter housing; do not use cleaning agents, abrasives, or solvents.

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