381
Remote Display True-rms Clamp Meter

Safety Information

A Warning identifies conditions and procedures that are dangerous to the user. A Caution identifies conditions and procedures that could cause Meter damage, equipment under test damage, or permanent loss of data.

⚠️⚠️ Warnings
To prevent possible electrical shock or personal injury, follow these guidelines:

• Use the Meter only as specified in the Users Manual or the protection provided by the Meter can be compromised.

• Examine the case before you use the Meter. Look for cracks or missing plastic. Carefully look at the insulation around the connectors.

• Examine the test leads for damaged insulation or exposed metal. Check test lead continuity. Replace damaged test leads before using the Meter.

• Do not use the Meter around explosive gas, vapor or in damp or wet environments.

To view, print, or download the latest manual supplement, visit http://us.fluke.com/usen/support/manuals.

Go to Fluke's website at www.fluke.com to read the User Manual and find more information about your Product.
• Use extreme caution when working around bare conductors or bus bars. Contact with the conductor could result in electric shock.

• Be careful around voltages >30 V ac rms, 42 V ac peak, or 60 V dc. Such voltages pose a shock hazard.

• Adhere to local and national safety codes. Individual protective equipment must be used to prevent shock and arc blast injury where hazardous live conductors are exposed.

• Do not work alone.

• Do not use the Meter if it operates incorrectly. Protection can be compromised. When in doubt, have the Meter serviced.

• Never measure ac current while the test leads are inserted into the input jacks.

• Do not apply more than the rated voltage, as marked on the Meter, between the terminals or between any terminal and earth ground.

• When using the probes, keep fingers behind the finger guards on the probes.

• When measuring, keep fingers behind the Tactile Barrier.

• Do not measure ac/dc current in circuits carrying more than 1000 V or 1000 A with the Meter Jaw.

• Do not measure ac current in circuits carrying more than 1000 V or 2500 A with the Flexible Current Probe.

• Take special care during fitting and removal of the Flexible Current Probe. De-energize the installation under test or wear suitable protective clothing.

• Measure a known voltage to verify product operation.

• Use the proper jacks, function, and range for the measurement application.

• Disconnect circuit power and discharge all high-voltage capacitors before you do diode tests or measure resistance, continuity, or capacitance.

• To avoid false readings that can lead to electrical shock and injury, replace the batteries as soon as the low battery indicator (meter or remote) appears.

• Remove the test leads from the Meter before the battery door is opened.

• Use only type AAA batteries, properly installed in the Meter case, to power the Meter.

• Never operate the Meter with the back cover removed or the case open.

• When servicing the Meter, use only specified replacement parts.

• Have the Meter serviced only by qualified service personnel.
### Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://example.com/warning-icon" alt="WARNING" /></td>
<td>WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.</td>
</tr>
<tr>
<td><img src="https://example.com/warning-icon" alt="WARNING" /></td>
<td>WARNING. RISK OF DANGER.</td>
</tr>
<tr>
<td><img src="https://example.com/documentation-icon" alt="Consult user documentation" /></td>
<td>Consult user documentation.</td>
</tr>
<tr>
<td><img src="https://example.com/ac-icon" alt="AC (Alternating Current)" /></td>
<td>AC (Alternating Current)</td>
</tr>
<tr>
<td><img src="https://example.com/dc-icon" alt="DC (Direct Current)" /></td>
<td>DC (Direct Current)</td>
</tr>
<tr>
<td><img src="https://example.com/battery-icon" alt="Battery" /></td>
<td>Battery</td>
</tr>
<tr>
<td><img src="https://example.com/wEEE-icon" alt="This product complies with the WEEE Directive marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 “Monitoring and Control Instrumentation” product. Do not dispose of this product as unsorted municipal waste." /></td>
<td></td>
</tr>
<tr>
<td><img src="https://example.com/earth-icon" alt="Earth" /></td>
<td>Earth</td>
</tr>
<tr>
<td><img src="https://example.com/ac-dc-icon" alt="AC and dc current." /></td>
<td>AC and dc current.</td>
</tr>
<tr>
<td><img src="https://example.com/eu-redirect" alt="Conforms to European Union directives." /></td>
<td>Conforms to European Union directives.</td>
</tr>
<tr>
<td><img src="https://example.com/di-icon" alt="Double Insulated" /></td>
<td>Double Insulated</td>
</tr>
<tr>
<td><img src="https://example.com/au-redirect" alt="Conforms to relevant Australian Safety and EMC standards." /></td>
<td>Conforms to relevant Australian Safety and EMC standards.</td>
</tr>
<tr>
<td><img src="https://example.com/dn-redirect" alt="Do not apply around or remove from uninsulated hazardous live conductors without taking additional protective measures." /></td>
<td>Do not apply around or remove from uninsulated hazardous live conductors without taking additional protective measures.</td>
</tr>
<tr>
<td><img src="https://example.com/permit-redirect" alt="Application around and removal from uninsulated hazardous live conductors is permitted." /></td>
<td>Application around and removal from uninsulated hazardous live conductors is permitted.</td>
</tr>
<tr>
<td><img src="https://example.com/korea-redirect" alt="Conforms to relevant South Korean EMC Standards." /></td>
<td>Conforms to relevant South Korean EMC Standards.</td>
</tr>
<tr>
<td><strong>CAT II</strong></td>
<td>Measurement Category II is applicable to test and measuring circuits connected directly to utilization points (socket outlets and similar points) of the low-voltage MAINS installation.</td>
</tr>
<tr>
<td><strong>CAT III</strong></td>
<td>Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building’s low-voltage MAINS installation.</td>
</tr>
<tr>
<td><strong>CAT IV</strong></td>
<td>Measurement Category IV is applicable to test and measuring circuits connected at the source of the building’s low-voltage MAINS installation.</td>
</tr>
</tbody>
</table>
Safety Specifications

Temperature
- Operating: -10 °C to +50 °C
- Storage: -40 °C to +60 °C

Operating Humidity
- Non condensing (< 10 °C)
  - ≤ 90 % RH (at 10 °C to 30 °C)
  - ≤ 75 % RH (at 30 °C to 40 °C)
  - ≤ 45 % RH (at 40 °C to 50 °C)
  (Without Condensation)

- Operating Altitude: 2000 meters
- Storage Altitude: 12 000 meters

Safety
- IEC 61010-1, Pollution degree 2
- IEC 61010-2-032: CAT III 1000 V / CAT IV 600 V
- IEC 61010-2-033: CAT III 1000 V / CAT IV 600 V

Electromagnetic Compatibility (EMC)
- International: IEC 61326-1: Controlled
- Electromagnetic Environment
  - CISPR 11: Group 1, Class A,
    - Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.
    - Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.
    - Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

- Korea (KCC): Class A Equipment (Industrial Broadcasting & Communication Equipment)
  - Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.

Radio frequency certification
- FCC ID: T68-F381, IC: 6627A-F381