Introduction
Thank you for purchasing the Hioki CT9667-01, CT9667-02, CT9667-03 AC Flexible Current Sensor. To obtain maximum performance from the product, please read this manual first, and keep it handy for future reference.

Be sure to also read the separate booklet “Current Sensor Operating Precautions” before use.

Use Environment of the Device

Although part of this device (the flexible loop part only) is designed to resist the ingress of dust and dripping water, it is not entirely waterproof or dustproof, so to avoid electric shock or damage, do not use it in a wet or dusty environment.

Troubleshooting
If the device seems to be malfunctioning, confirm that the batteries are not discharged before contacting your authorized Hioki distributor or reseller.

Overview
This device measures large currents of up to 5000 A AC. The air core coil makes the sensor unit highly flexible, allowing it to be used for tapping in narrow spaces with crowded wiring.

Specifications

<table>
<thead>
<tr>
<th>Operating environment</th>
<th>CT9667-01</th>
<th>CT9667-02</th>
<th>CT9667-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring instrument</td>
<td>Indoors, pollution degree 2, altitude up to 2000 m (6562 ft.)</td>
<td>Indoors, pollution degree 2, altitude up to 2000 m (6562 ft.)</td>
<td>Indoors, pollution degree 2, altitude up to 2000 m (6562 ft.)</td>
</tr>
<tr>
<td>Operating temperature and humidity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>−25°C to 65°C (−13°F to 149°F)</td>
<td>−10°C to 50°C (14°F to 122°F)</td>
<td>−10°C to 50°C (14°F to 122°F)</td>
</tr>
<tr>
<td>Humidity</td>
<td>Less than 40% (104°F)</td>
<td>Less than 40% (104°F)</td>
<td>Less than 40% (104°F)</td>
</tr>
<tr>
<td>(no condensation)</td>
<td>Maximum relative humidity declining linearly from 80% RH at 40°C (104°F) to 25% RH at 65°C (149°F)</td>
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</tr>
</tbody>
</table>

Conditions of guaranteed accuracy
Guaranteed accuracy period: 1 year

Guaranteed accuracy period: 1 year

Guaranteed accuracy period: 1 year

Opening and closing of the flexible loop: 10000 times or less

Within ±1% 

Within ±1.0% (at 45 Hz to 66 Hz)

Within ±1% (at 45 Hz to 66 Hz)

Within ±3% (deviation from center)

Within ±3% (deviation from center)

Within ±3% (deviation from center)
**Parts Names**

Example: CT9667-01

**Measurement Methods**

**Inspection Before Use**

Verify that the device operates normally to ensure that no damage occurred during storage or shipping. If you find any damage, contact your authorized Hioki distributor or reseller.

<table>
<thead>
<tr>
<th>Check Items</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the flexible loop or cable insulation torn, or is any metal exposed?</td>
<td>Device damage may result in electric shock. Contact your authorized Hioki distributor or reseller.</td>
</tr>
<tr>
<td>Is there a broken connection involving the connector or sensor base?</td>
<td>Broken connections will make proper measurement impossible. Discontinue use and contact your authorized Hioki distributor or reseller.</td>
</tr>
<tr>
<td>When the switch is placed in any position other than OFF, does the POWER LED turn green?</td>
<td>Lights up (red): Battery life is low. → Replace the batteries soon. Turns off: There is no battery life remaining. → Replace the batteries immediately.</td>
</tr>
</tbody>
</table>

• When using an AC adapter, always use the optional AC adapter.
• When using the AC adapter and batteries at the same time, the AC adapter takes precedence. Switching power supplies during measurement may introduce noise into the device’s output.
• When using the AC adapter for continuous monitoring, we recommend that you also use batteries to prevent interruptions due to instantaneous power outages.
• After use, always turn off the power.
• Be aware of the following precautions to avoid damage to the device:

<table>
<thead>
<tr>
<th>LED indicator</th>
<th>Lights up (Green)</th>
<th>Lights up (Red)</th>
<th>Turns off</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER LED</td>
<td>Power on.</td>
<td>Battery life is low.*</td>
<td>There is no battery life remaining*, or power off.</td>
</tr>
<tr>
<td>OVER LED</td>
<td>Range exceeded (peak value of at least 3 x range).</td>
<td>Normal measurement, or power off.</td>
<td></td>
</tr>
</tbody>
</table>

* When using battery power.

**Connect the BNC connector to the connected instrument**

1. Align and insert the connector.
2. Lock

**Connect the flexible loop to the coupling**

Example: CT9667-01, CT9667-02

1. Insert
2. Rotate the dial until the blue mark is in the LOCK position.

**Clamp the conductor**

Clamp only the conductor you wish to measure with the current direction indicator pointing toward the load side. (To ensure that the measured current and sensor output have the same phase.)

**Select the range depending on the current value to be measured**

Example: CT9667-01, CT9667-02

1. Insert
2. Rotate the dial until the blue mark is in the LOCK position.

Pulling on the flexible loop with a large amount of force while in the locked state may cause it to become disconnected from the coupling.

**Memo**

Example: CT9667-01, CT9667-02

1. Rotate the dial until the blue mark is in the UNLOCK position.

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**Example: CT9667-01**