

## CT — Current Transformer

### 1. Introduction

CT (Current Transformer) is a specialized device used to measure the current in a circuit. In the inverter system, CT can be used to detect and monitor grid power (voltage, current frequency and electrical energy) and transmit the information to the inverter, thus ensuring safe system operation and helping to optimise the efficiency of energy utilisation.

In addition, through the Smart APP, users can monitor the current data in real time and adjust the operating parameters of the system as needed to maximize energy efficiency.

### 2. CT

#### 2.1. Technical characteristics

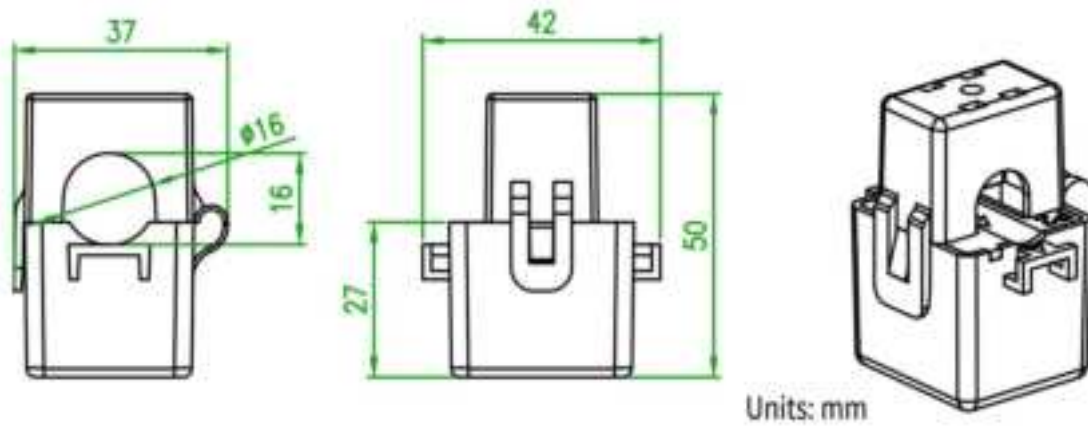
- Easy to install
- Compact & convenient
- High accuracy and high load carrying capacity
- Comply with: IEC/EN61869-1, IEC/EN61869-2, UL E52031

#### 2.2. Technical Parameters

- Rated current ratio: 90/90mA
- Rated operating voltage: AC 0.66kV (equivalent AC 0.69kV, GB/T 156-2017)
- Frequency withstand voltage: 3000V/1min, 50Hz
- Rated frequency: 50/60Hz
- Accuracy class: I
- Perforation size:  $\Phi$  16 mm
- Number of perforated turns: 1
- Ambient temperature: -30℃~70℃
- Altitude: ≤3000m

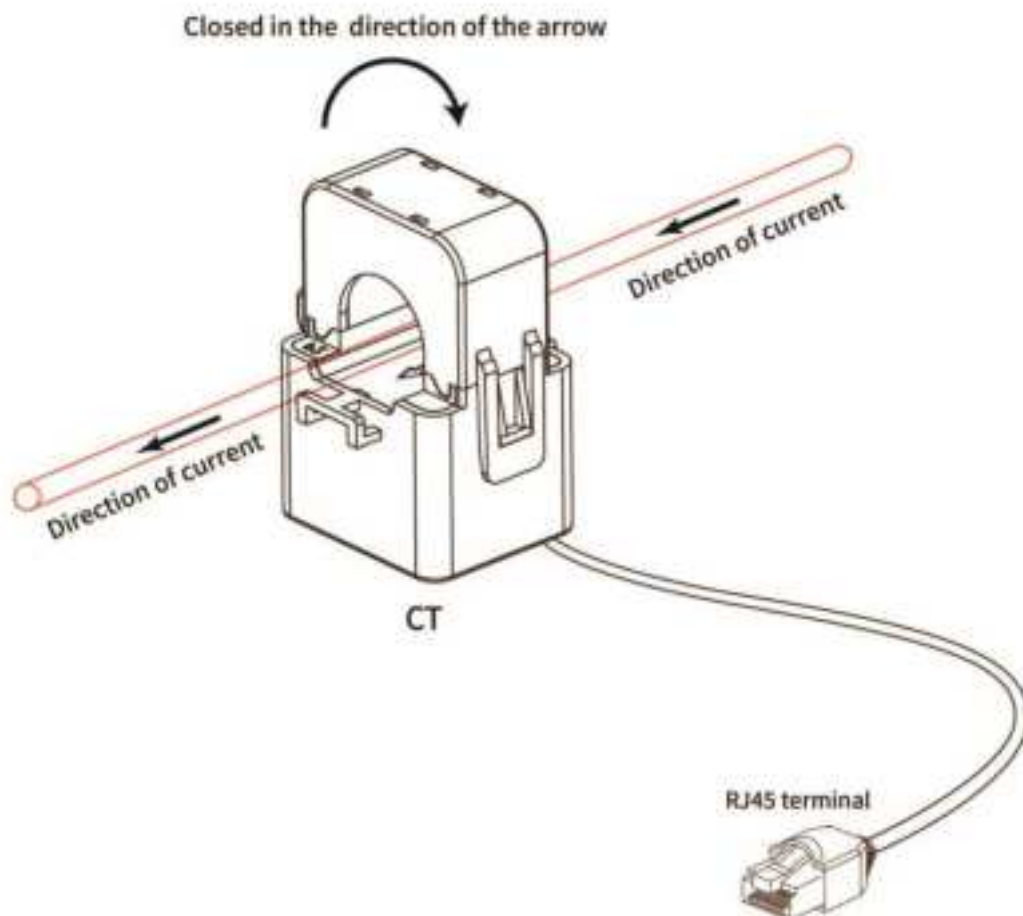
Notice: Please use it in places where there is no direct attack by rain or snow, no serious pollution and violent vibration.

## 2.3. Dimensions



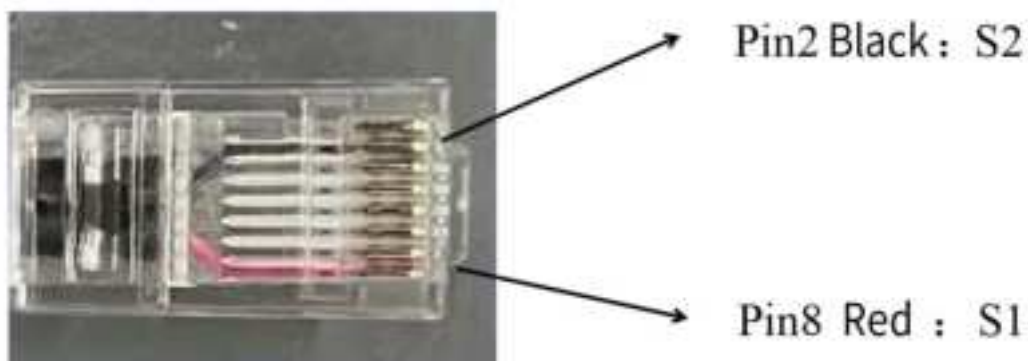
## 2.4. Installation

Please note the direction of CT installation.

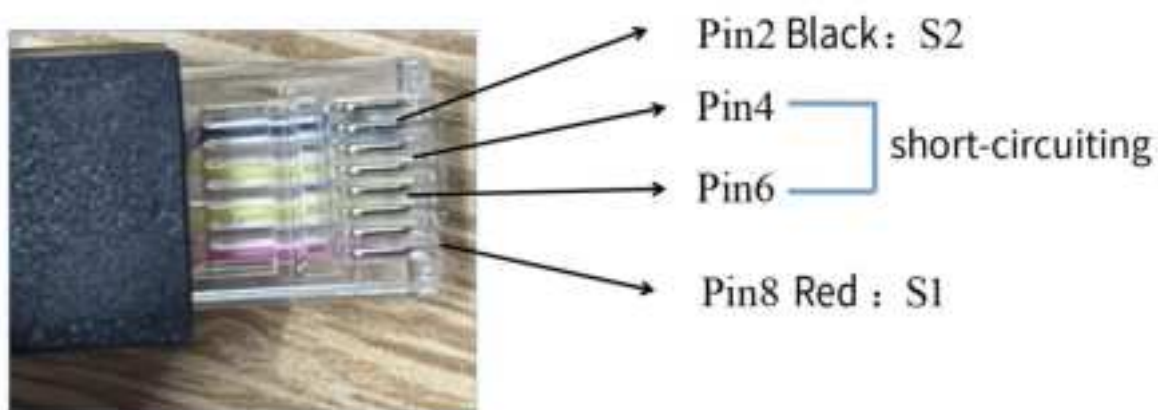


## 2.5. RJ45 terminal definition

- RJ45 port definition for matching single phase hybrid inverters



- RJ45 port definition for matching single-phase off-grid inverters

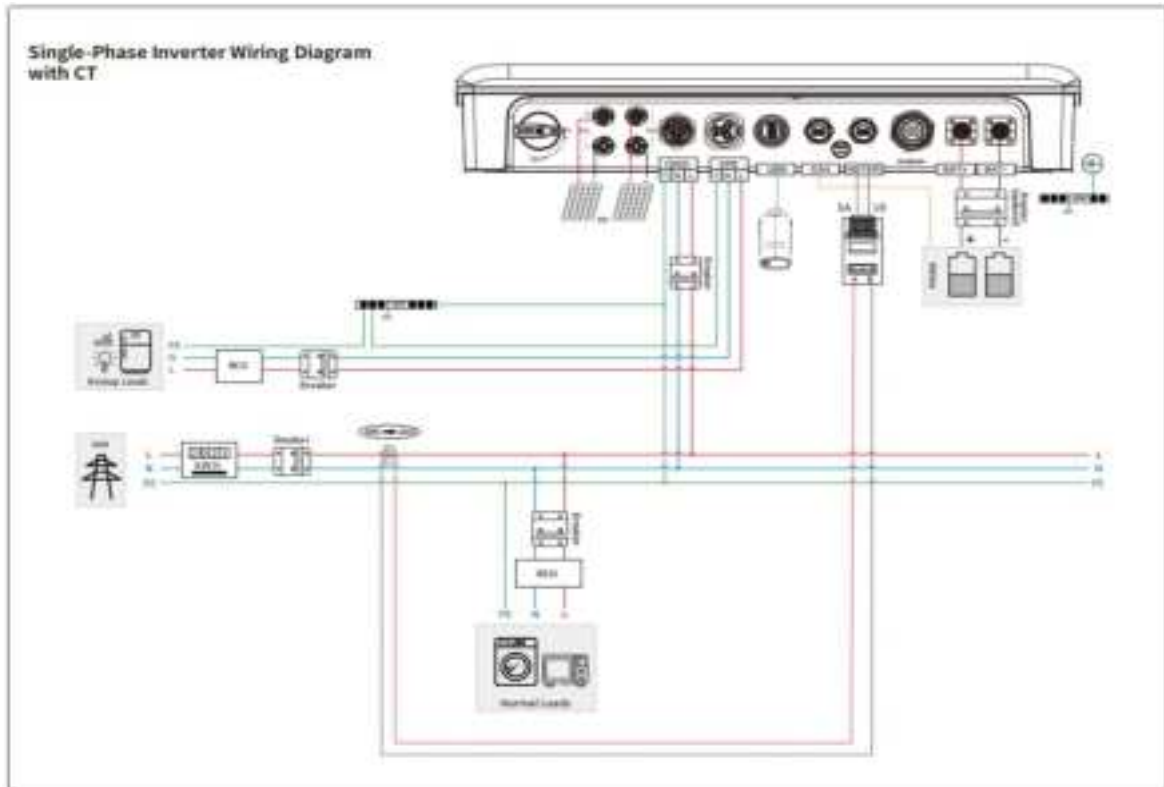


\* HINEN single-phase hybrid inverters: H3000-EU, H3600-EU, H4000-EU, H4600-EU, H5000-EU, H6000-EU;

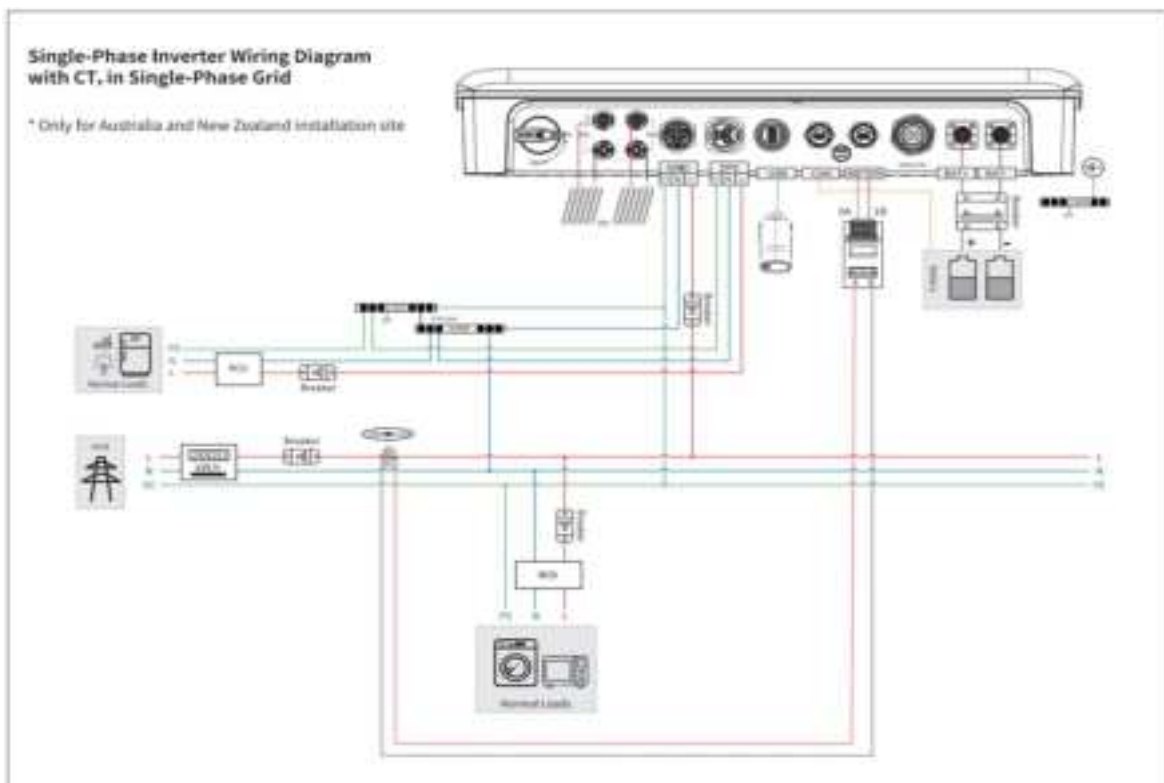
\* HINEN single-phase off-grid inverters: H3600-OG, H4000-OG, H4600-OG, H5000-OG, H6000-OG.

## 3. CT and single-phase hybrid inverter connection

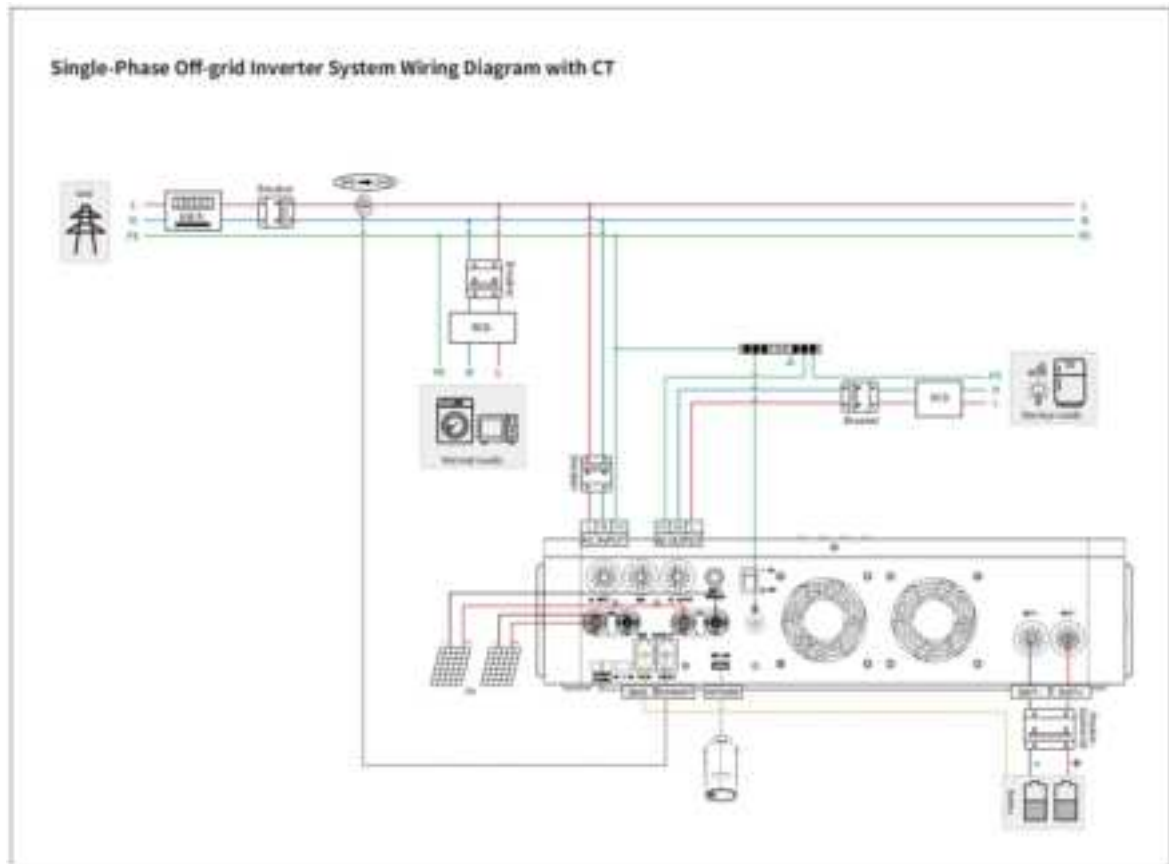
- Single-Phase Hybrid Inverter Wiring Diagram with CT



- Single-Phase Hybrid Inverter Wiring Diagram with CT (Only for Australia and New Zealand installation site).



- Single-Phase Off-grid Inverter Wiring Diagram with CT.



**Notice:**

1. Make sure the AC cable is totally isolated from AC power before connecting the CT.
2. The direction of CT cannot be reversed, and the direction of current points to the inverter.