Technical Specifications of AC Coupling Function

1 Definition & Architecture

AC Coupling enables energy exchange between the energy storage system and distributed power sources via a dual-CT metering system, achieving efficient power conversion and dynamic allocation through the AC bus.

Core Workflow

1. CT1: Grid Interaction Metering

- Monitors the system's net export/import power to/from the grid in real time.
- Coordinates with the storage inverter to regulate grid-tied power.

2. CT2: Power Generation Metering

- Accurately measures the real-time generation output of distributed power sources.
- Provides a data benchmark for energy dispatch optimization.

Note: The anti-reverse flow setting in this mode can only control the energy storage inverter and cannot control the grid-connected inverter supply.

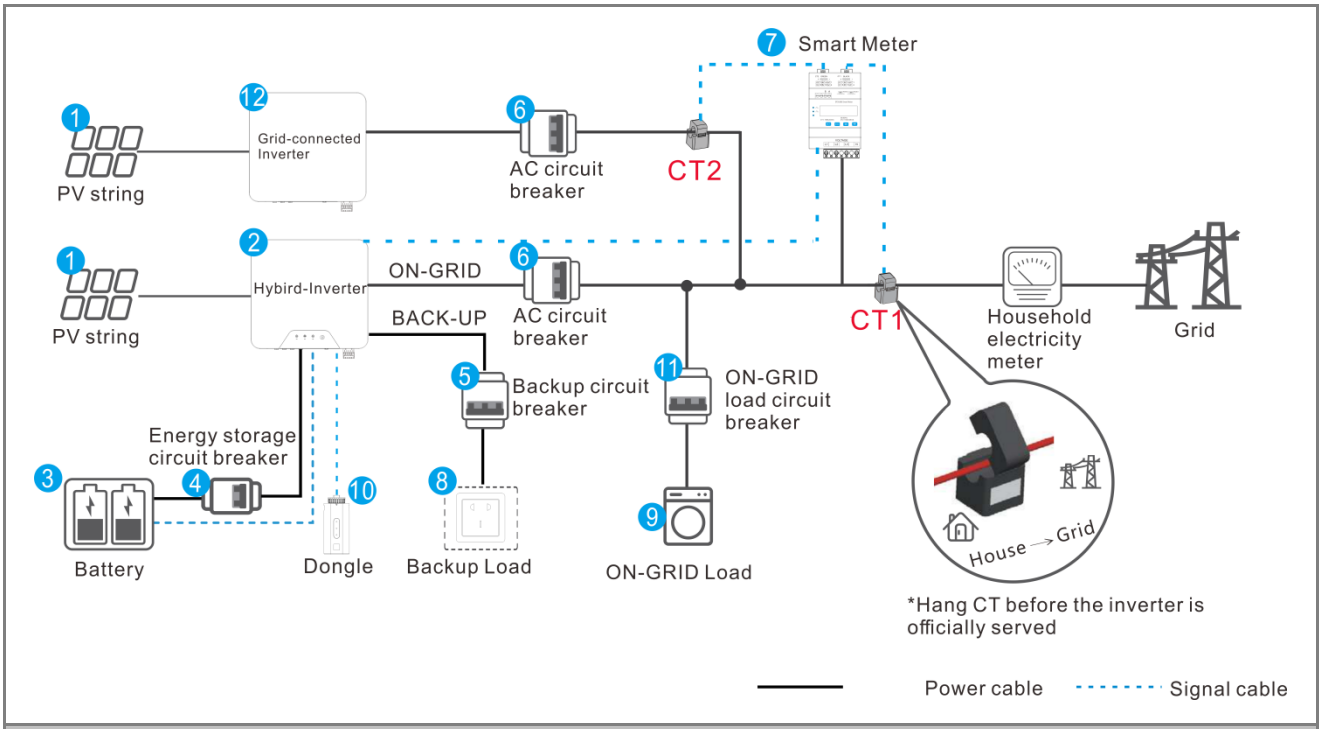

Figure 1-1

S/N	Parts	Description
1	PV string	PV string consists of PV modules
2	Inverter	Applicable inverters: SN15HT/SN12HT/SN10HT/SN10HT-X/SN8.0HT/SN6.0HT/SN5.0H

		T series.
3	Battery	Select the appropriate models based on the matching table of the inverter and battery. The approved list of batteries may be obtained on the website or via the APP.
4	Energy storage circuit breaker	Recommended capacity: rated current≥40A, rated voltage>600V.
5	Backup circuit breaker	To be specified in conjunction with the actual load.
6	AC circuit breaker	Recommended specification: SN15HT/SN12HT: rated current≥50A SN10HT/ SN10HT-X/SN8.0HT: rated current≥32A SN6.0HT/SN5.0HT: rated current≥25A
7	Smart meter	To be purchased from the inverter manufacturer, recommended model: AC smart meter-DTSU666.
8	Backup load	Support connection of standby loads, such as other important loads.
9	On-grid load	Household appliances
10	Dongle	WLAN/4G communication stick
11	On-grid load circuit breaker	To be specified in conjunction with the actual load.
12	Grid-connected inverter	A power conversion device that converts direct current generated by renewable energy sources (such as solar energy) into alternating current and connects it to the public grid

Table 1-1 AC coupling system scheme

2 AC coupling settings

Function: It can be used to monitor the on-grid power in the whole system and the generation of grid-connected inverter.

Dual-CT meters need to be installed according to the requirements, and the following steps should be followed for setting:

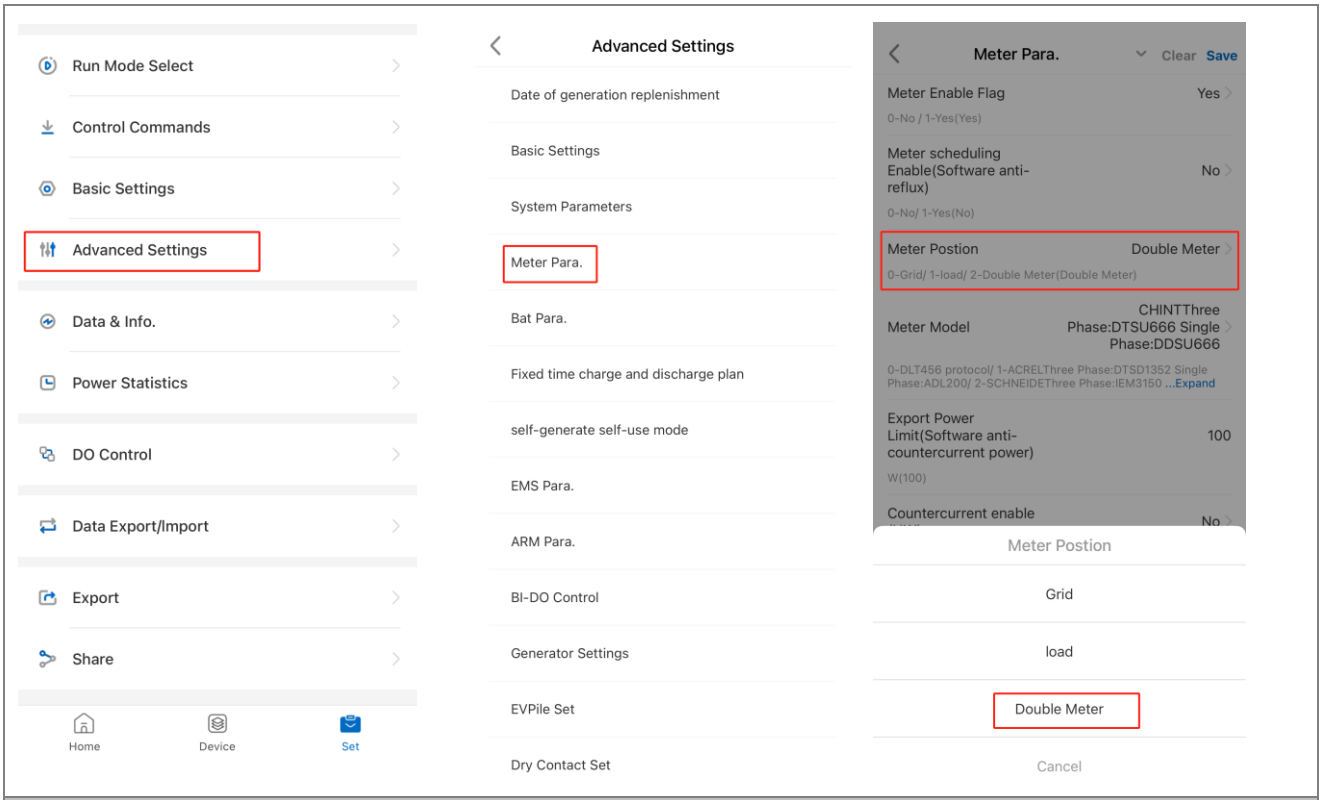
Run Mode Select
Control Commands
Basic Settings
Advanced Settings
Data & Info.
Power Statistics
DO Control
Data Export/Import
Export
Share
Home
Device
Set
Advanced Settings
Date of generation replenishment
Basic Settings
System Parameters
Meter Para.
Bat Para.
Fixed time charge and discharge plan
self-generate self-use mode
EMS Para.
ARM Para.
BI-DO Control
Generator Settings
EVPile Set
Dry Contact Set
Meter Para.
Clear
Save
Meter Enable Flag
Yes
0-No / 1-Yes(Yes)
Meter scheduling Enable(Software anti-reflux)
No
0-No/ 1-Yes(No)
Meter Postion
Double Meter
0-Grid/ 1-load/ 2-Double Meter(Double Meter)
Meter Model
CHINTThree Phase:DTSU666 Single Phase:DDSU666
0-DLT456 protocol/ 1-ACRELThree Phase:DTSD1352 Single Phase:ADL200/ 2-SCHNEIDEThree Phase:IEM3150 ...Expand
Export Power Limit(Software anti-countercurrent power)
100
W(100)
Countercurrent enable
No
Meter Postion
Grid
load
Double Meter
Cancel

Figure 2-1