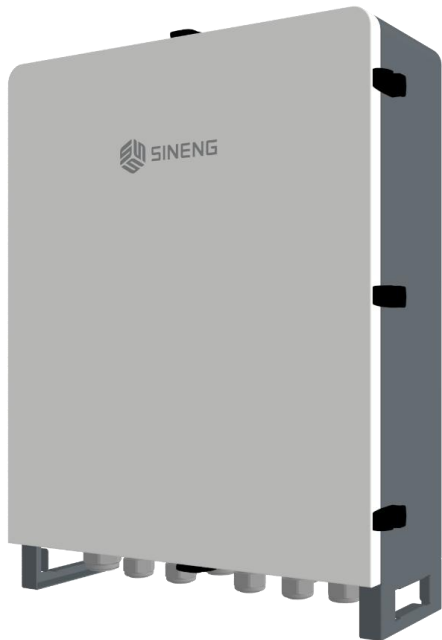




Hybrid Inverter Smart Panel and HTC Energy Storage System

Communication Wiring Instruction




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Contact Method

Website: <https://www.si-neng.com/>

Preface

Thank you for choosing the product from Sineng Electric Co., Ltd. (hereinafter referred to as Sineng). This manual describes instructions on proper use of the product. Please read this manual carefully before using the product. Please keep this manual properly for future reference.

Overview





This document describes the energy storage system (also referred to as product, device, or battery) in terms of its overview, application scenarios, installation, commissioning, system maintenance, and technical specifications.

Intended Audience

- Technical support engineers
- Commissioning engineers
- Maintenance engineers
- Hardware installation engineers

Sign Conventions

The following symbols are used in the description of safety or critical information in this manual. Please pay attention or abide by the information marked with the following signs.

Symbol	Description
 Danger	Indicates that a seriously dangerous situation may occur, which, if not avoided, may result in serious personal injuries or casualties.
 Warning	Indicates that a potentially dangerous situation may occur, which, if not avoided, may result in personal injuries, equipment damage, etc.
 Caution	Indicates that an unpredictable situation may occur, which, if not avoided, may result in equipment damage, performance deterioration, data loss, etc.
 Note	Indicates key information elaboration and operational tips.

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Chapter 1 Communication Wiring Instruction

Warning

- Connect communication cables in strict accordance with the port labels.
- When laying communication cables, please ensure they are routed separately from power cables to prevent signal interference that may affect communication.

Operation Steps

1.1 Hybrid Inverter Smart Panel

Step 1 Remove the nut from the bottom wiring hole, thread the cable through the nut, and route it into the Smart Panel.

Step 2 Thread the communication cable through the lock and fabricate the communication cable.

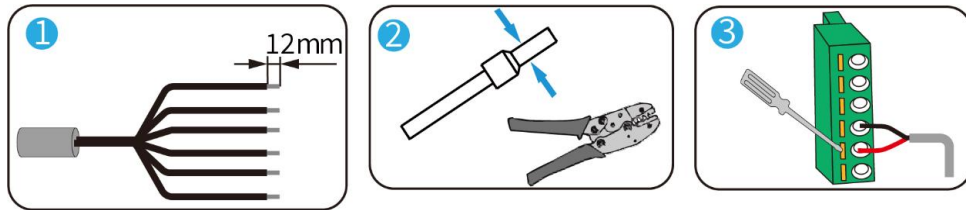


Figure1-1 Communication Cable Fabrication (Unit: mm)

Step 3 Insert the cable into the corresponding port.

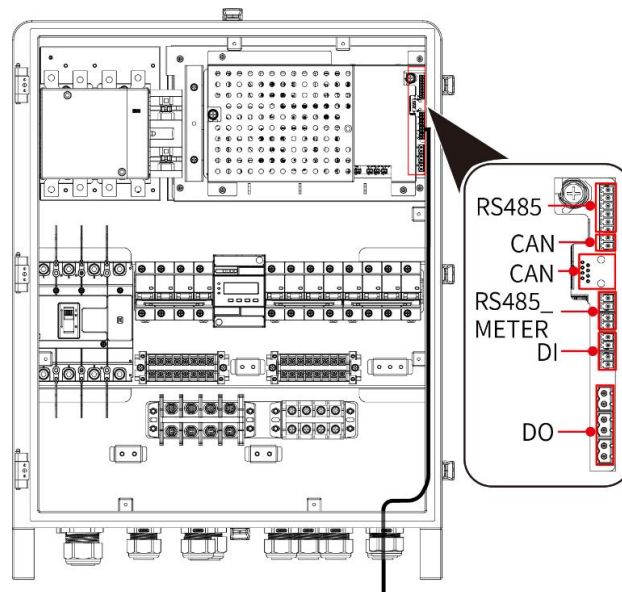


Figure1-2 Schematic Diagram of Communication Cable Connection

1.2 HTC Energy Storage System

Step 4 Pass the cables through the decorative cover.

Step 5 Making cable.

Step 6 Push the connector head into the slot of the connector, and use a wrench to tighten the cable locking nut.

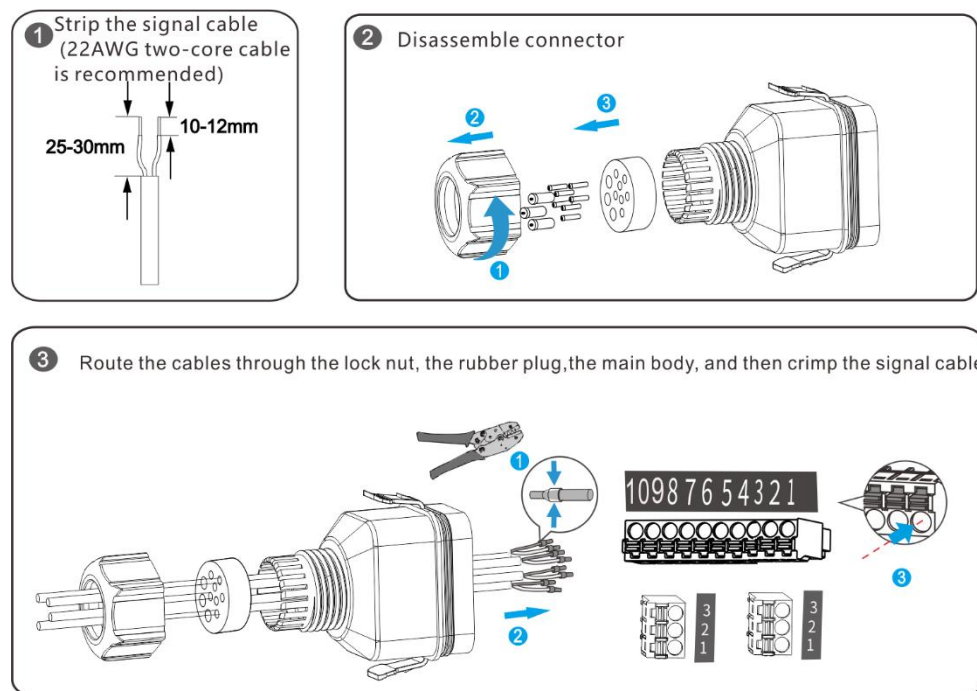


Figure1-3 Making cable

Step 7 Insert the cable into the 485 port and tighten the connector nut.

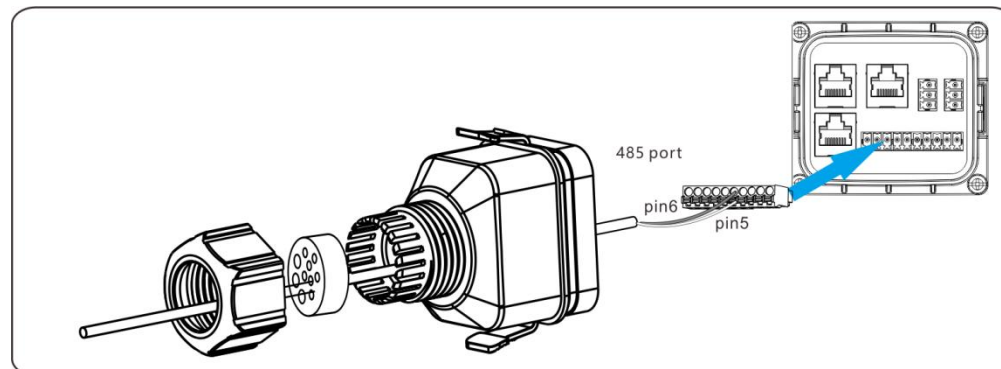


Figure1-4 Install the communication cable

Step 8 Connect the communication cable. (DRM terminal connection)

PIN	Colour	Definition
1	Orange/White	GNDS
2	Orange	5VS
3	Green/White	COM/DRM0_OUT
4	Blue	DRM1/5_OUT
5	Blue/White	DRM2/6_OUT
6	Green	DRM3/7_OUT
7	Brown/White	DRM4/8_OUT
8	Brown	DRM COM

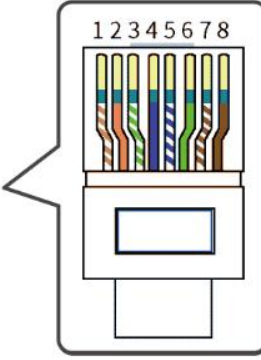


Figure1-5 Install the communication cable

Step 9 Parallel system connection.

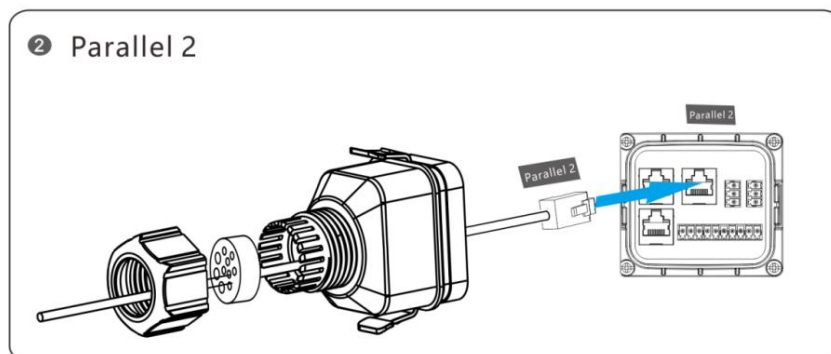
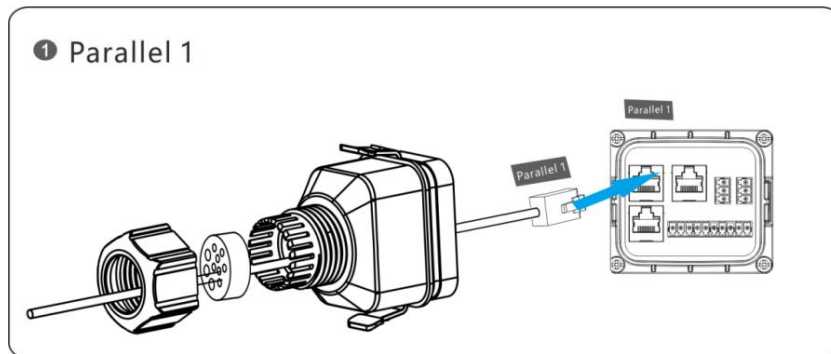


Figure1-6 Install the communication cable 1

Step 10 Connect the cable to this unit's 485 port and daisy-chain it to the next unit.

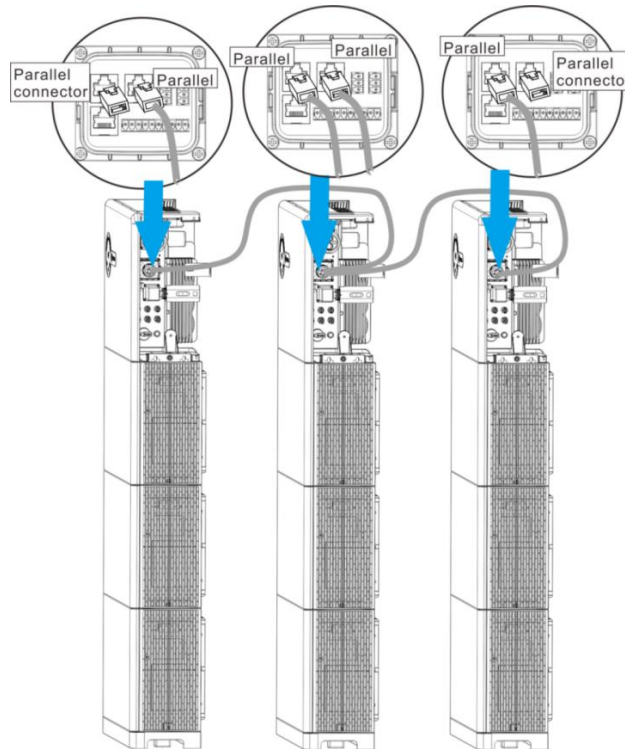


Figure1-7 Three-machine parallel cable connection

1.3 Hybrid Inverter Smart Panel and HTC Energy Storage System

Step 11 Connect a cable from the additional parallel 485 port on the first device to the 485 port of the smart Panel.

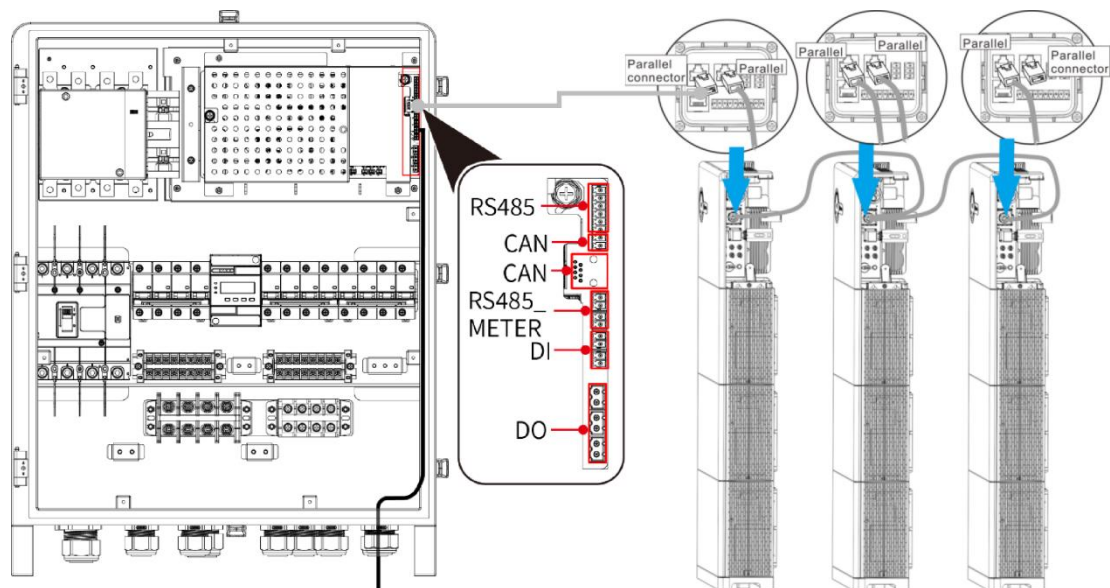


Figure1-8 Hybrid Inverter Smart Panel & HTC System Communication Wiring

Step 12 Complete the connection of the remaining communication cables..

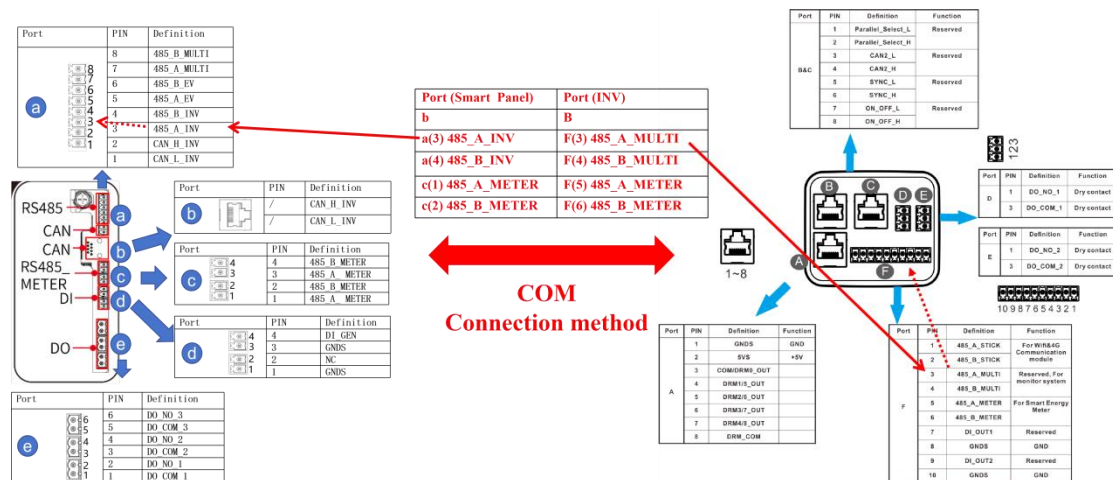


Figure1-9 Parallel Communication Cable Connection Diagram

1.4 Parallel Communication Cable Connection

Table 1-1 Parallel Communication Cable Mapping

Hybrid Inverter Smart Panel			HTC Energy Storage System		
Port	PIN	Definition	Port	PIN	Definition
b	3	CAN_L_INV	B	3	CAN2_L
	4	CAN_H_INV		4	CAN2_H
a	3	485_A_INV	F	3	485_A_MULTI
a	4	485_B_INV	F	4	485_B_MULTI
c	1	485_A_METER	F	5	485_A_METER
c	2	485_B_METER	F	6	485_B_METER

The mapping relationships for the parallel communication cables are shown in Table 1-1. Connect the cables according to the corresponding relationships in the table.

Connection Example:

- Smart Junction Box Port A, Pin 3 (485_A_INV, from bottom to top)
→ HTC Energy Storage System Port F, Pin 3 (485_A_MULTI, from right to left)

Other Cable Connections:

- Smart Junction Box RJ45 Port
→ HTC Energy Storage System Port B RJ45 Port

All other cables shall be connected in accordance with Table 1-1.

Appendix A After-sales Service Information

Sineng Electric Co., Ltd. provides a full range of technical support services for customers. Customers can contact the nearest Sineng local office or customer service center, or directly contact the HQ.

Sineng Electric Co., Ltd.

Address: No.6, Hehui Road, Huishan Economic Development Zone, Wuxi, China

Postal code: 214174

Customer service hotline: 400-928-6988