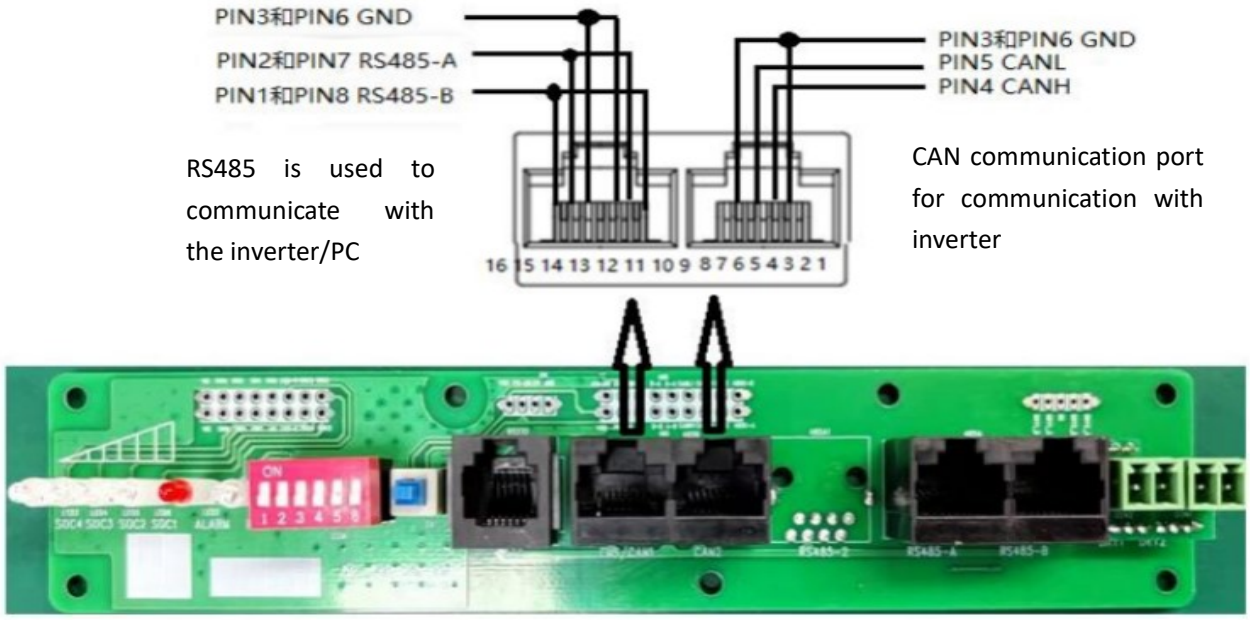
Cable connections between the BMS and the inverter

1.BMS interface definition



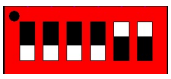
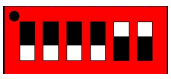
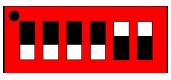
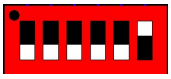
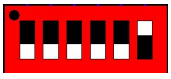
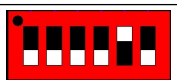
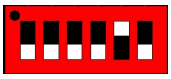
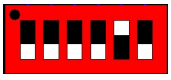
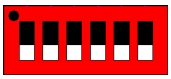
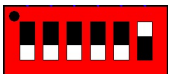
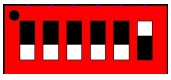
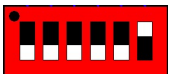
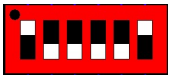
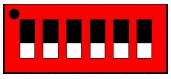
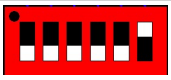
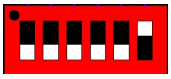
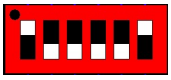
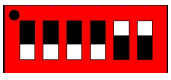
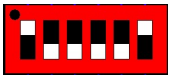
RS485 interface (communication with host computer or inverter) Support for Voltronic, SREN, Growatt inverter protocol - through the dip to select different addresses		CAN communication interface (only inverter communication) Support for Victron, Pylon, SMA, Goodway, Growatt, inverter protocols-select different protocols through dip	
RS485-8P8C RJ45 Pins Assignment		**CAN - 8P8C RJ45 Pins Assignment**	
Pins	Definition	Pins	Definition
9、16	RS485-B	4	CANH
10、15	RS485-A	5	CANL
11、14	GND	3、6	GND
12、13	NC	1、2、7、8	NC

Parallel communication port (for parallel only)			
RS485-A 8P8C RJ45 Pins Assignment		**RS485-B 8P8C RJ45 Pins Assignment**	
Pins	Definition	Pins	Definition
9、16	RS485B	1、8	RS485B
10、15	RS485A	2、7	RS485A
11、14	GND	3、6	GND
12、13	NC	4、5	NC

2.Slave dialing method and host protocol selection

Address	Dip switch address setting				Protocol selection		Expiain
	#1	#2	#3	#4	#5	#6	
0	OFF	OFF	OFF	OFF	OFF	OFF	**(Host)** Pack0
1	ON	OFF	OFF	OFF	OFF	OFF	(slave) Pack1
2	OFF	ON	OFF	OFF	OFF	OFF	(slave) Pack2
3	ON	ON	OFF	OFF	OFF	OFF	(slave) Pack3
4	OFF	OFF	ON	OFF	OFF	OFF	(slave) Pack4
5	ON	OFF	ON	OFF	OFF	OFF	(slave) Pack5
6	OFF	ON	ON	OFF	OFF	OFF	(slave) Pack6
7	ON	ON	ON	OFF	OFF	OFF	(slave) Pack7
8	OFF	OFF	OFF	ON	OFF	OFF	(slave) Pack8
9	ON	OFF	OFF	ON	OFF	OFF	(slave) Pack9
10	OFF	ON	OFF	ON	OFF	OFF	(slave) Pack10
11	ON	ON	OFF	ON	OFF	OFF	(slave) Pack11
12	OFF	OFF	ON	ON	OFF	OFF	(slave) Pack12
13	ON	OFF	ON	ON	OFF	OFF	(slave) Pack13
14	OFF	ON	ON	ON	OFF	OFF	(slave) Pack14
15	ON	ON	ON	ON	OFF	OFF	(slave) Pack15
Inverter communication protocol Select CAN communication (select by DIP 5 and 6 in host mode)							
0	OFF	OFF	OFF	OFF	OFF	OFF	Luxpower
32	OFF	OFF	OFF	OFF	OFF	ON	Pylon, Deye
16	OFF	OFF	OFF	OFF	ON	OFF	Victron SMA,SOFAR
48	OFF	OFF	OFF	OFF	ON	ON	Growatt
Inverter communication protocol RS485 communication (Select DIP 5 and 6 in host mode)							
0	OFF	OFF	OFF	OFF	OFF	OFF	SRNE
32	OFF	OFF	OFF	OFF	OFF	ON	Voltronic
48	OFF	OFF	OFF	OFF	ON	ON	Growatt

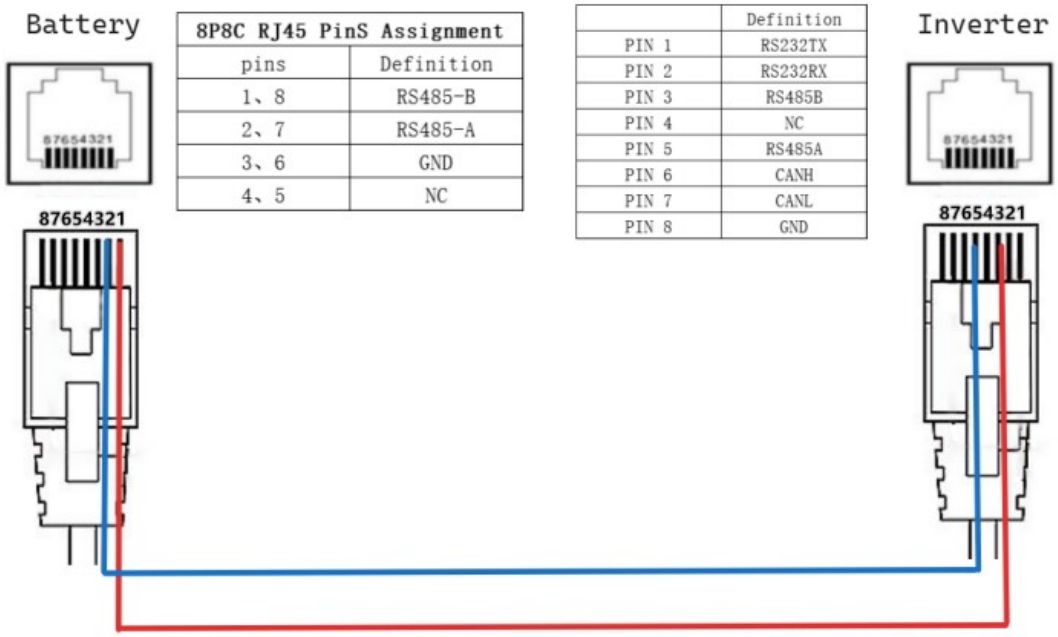
3. Inverter pins definition

Inverter manufacturer	communication mode	BMS DIP switch mode of the host	Inverter interface definition	Use standard network cables
Growatt-SPF	CAN		4H, 5L	OK
Growatt-SPF	485		1B, 2A	OK
Growatt-SPH	CAN		4H, 5L	OK
Goodwe	CAN		4H, 5L	OK
Solis	CAN		4H, 5L	OK
Sofar	CAN		1H, 2L	Customized network cable
SMA	CAN		4H, 5L	OK
Victron	CAN		7H, 8L	Customized network cable
Luxpower	CAN		4H, 3L	Customized network cable
Deye	CAN		4H, 5L	OK
Sorotec	CAN		4H, 5L	OK
Megarevo	CAN		4H, 5L	OK
Voltronic	485		3B, 5A	Customized network cable
SRNE	485		7A, 8B	Customized network cable
senergy	CAN		4H, 5L	OK
Sol-Ark	CAN		4H, 5L	OK
MPP Sola	485		3B, 5A	Customized network cable
Sacolar	CAN		4H, 5L	OK
TRONTE	485		3B, 5A	Customized network cable

4. Connection example

1.communication line production

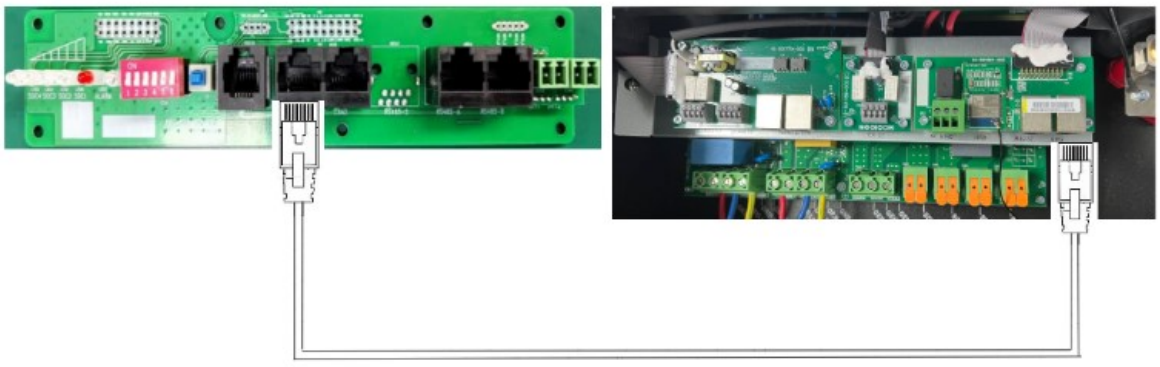
BMS followed by 1B, 2A; Inverter to 3B, 5A



8P8C RJ45 PinS Assignment	
pins	Definition
1、8	RS485-B
2、7	RS485-A
3、6	GND
4、5	NC

	Definition
PIN 1	RS232TX
PIN 2	RS232RX
PIN 3	RS485B
PIN 4	NC
PIN 5	RS485A
PIN 6	CANH
PIN 7	CANL
PIN 8	GND

The battery is connected to RS485A port, and the inverter is connected to BMS port

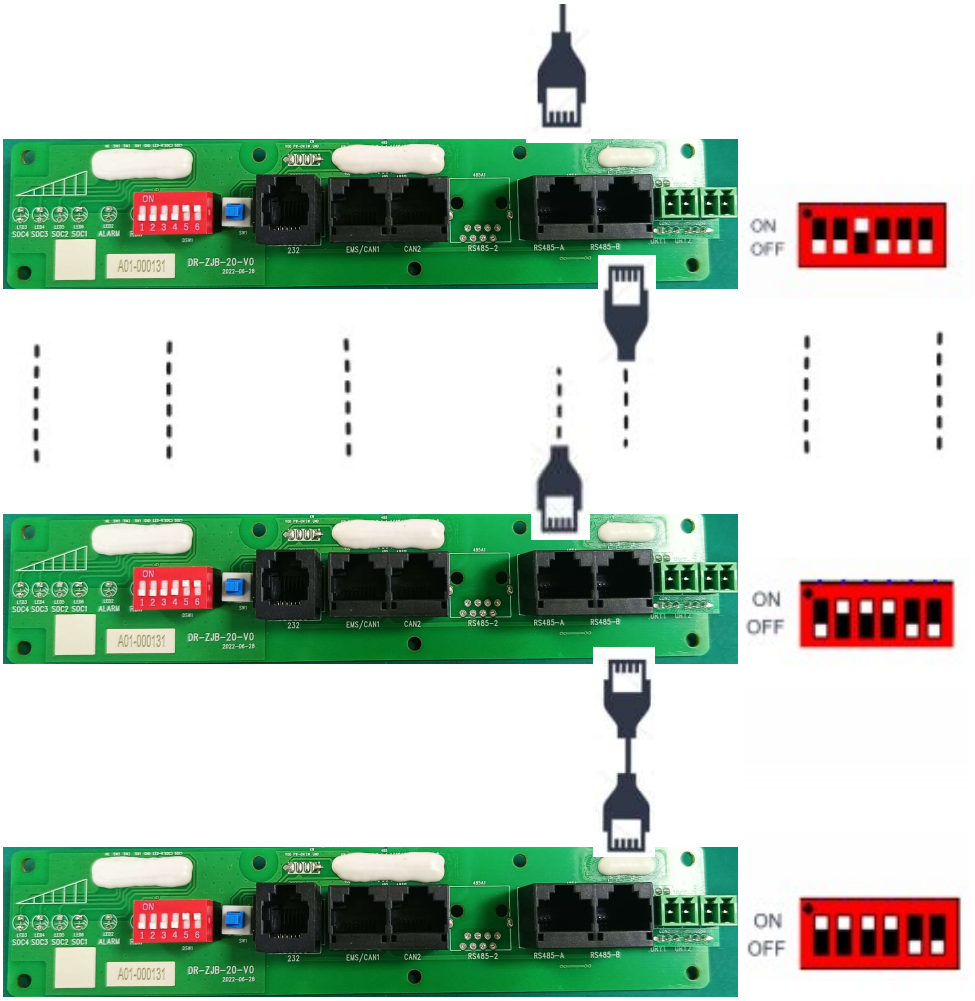


5. Parallel example

The address of the PACK1 host is 0, that is, DIP codes 1/2/3/4 are set to OFF, and DIP codes 5/6 are used for protocol selection

PACK2 Slave IP address is set to 2， and DIP switch 2 is set to ON

PACK3 Slave IP address is set to 3， and DIP switch 3 is set to ON



PACK4 Slave IP address is set to 4， and DIP switch 4 is set to ON

Refer to the attached table
And so on

PACK14 Slave IP address is set to 14，and DIP switch 14 is set to ON

PACK15 Slave IP address is set to 15，and DIP switch 15 is set to ON