

Hardware connection

luxpower SNA 3-6K

LFP51.2KW、10.5KWH51.2V

2.3.2 Lithium Battery Connection

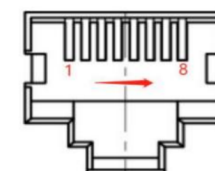
If choosing lithium battery for SNA series, please make sure the battery BMS is compatible with Luxpower inverter. Please check the compatible list in the Luxpower website.

Please follow below steps to implement lithium battery connection:

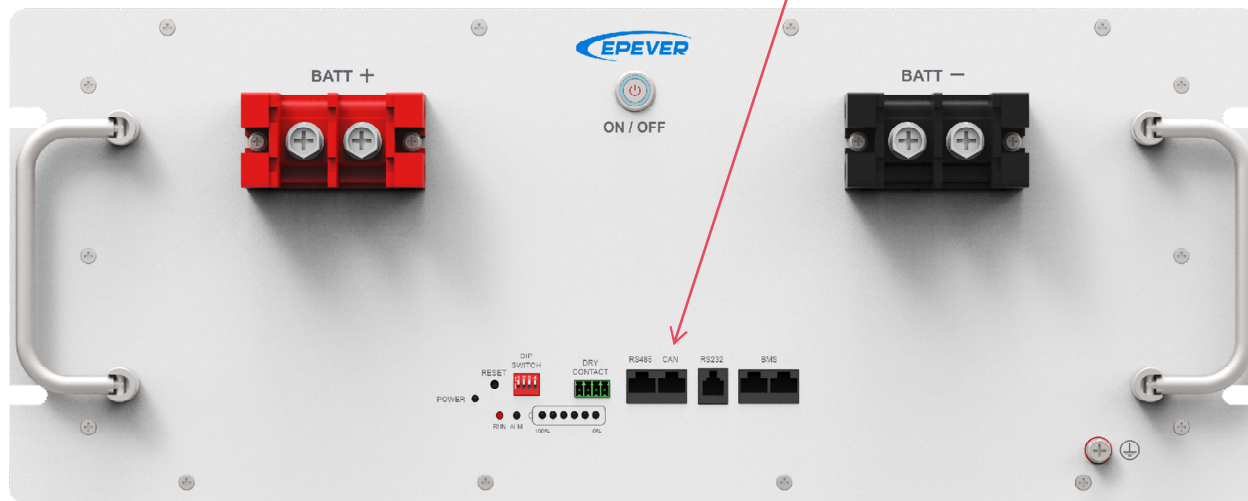
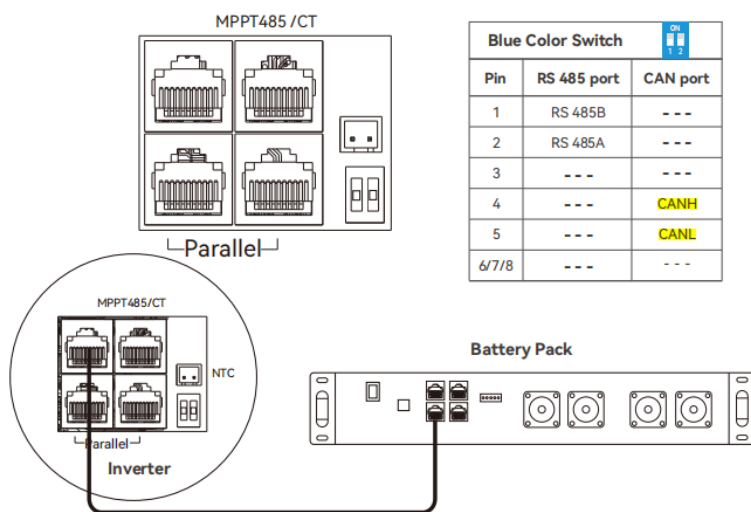
1. Connect power cable between inverter and battery
2. Connect the CAN or RS485 communication cable between inverter and battery. If you do not get the communication cable from inverter manufacturer or battery manufacturer, please make the cable according to the PIN definition
3. Lithium battery configuration, in order to communicate with battery BMS, you should set the battery type to "Li-ion" in Program "03" by LCD and choose the right battery brand (for details, please check the LCD setting chapter), users can also choose the battery type and brand by monitor system. If using a Luxpower battery, select lithium type for option 6: Luxpower; for Hina battery, select lithium type option 1: Hina Battery.

- The CAN/RS485 communication pin is defined as follows. The RJ45 communication port is used to connect the lithium battery to the inverter host.

Pin	RJ45 definition	Pin	RJ45 definition
1	RS485-B	5	CAN-L
2	RS485-A	6	CAN-H
3	GND	7	RS485-A
4	CAN-H	8	RS485-B



(RJ45)



Protocol selection

Plan A : select "Luxpower" from battery CAN communicate

Plan B : select "Pylon" from both battery and Inverter CAN

luxpower SNA 3-6K

LFP51.2KW、10.5KWH51.2V



Updated date: 2024-12-17
Version: LXP-BL-SA-02

Luxpower Compatible Battery List

South Africa market

1. Low-voltage battery brands and compatible PCS models

Battery Brand (LV battery series)	Protocol Type				Compatible Battery Model	Compatible PCS Model
	CAN	Battery Code	RS485	Battery Code		
Luxpowertek	LUX	6	/	/	Li51 PGEM PGEM PRO PowerShield	LXP-LB-EU 7-12K / GEN-LB-EU 7-10K /LXP 3-6KHybrid/ GEN-LB-EU 3-6K /SNA 3000-6000 / LXP 3600ACS (SQ-POD) 3600 / SNA12K
HINAESS	LUX	1	/	/	Hi 5 / PowerGEM / PowerGEM PLUS/PowerGem Max PowerShield/PowerShield Plus/PowerShield Max	LXP-LB-EU 7-12K / GEN-LB-EU 7-10K /LXP 3-6KHybrid/ GEN-LB-EU 3-6K /SNA 3000-6000 / LXP 3600ACS (SQ-POD) 3600 / SNA12K
Pylontech	Pylon	2	/	/	US2000/US2000C/US3000/US3000C /UP5000 /US6000	LXP-LB-EU 7-12K / GEN-LB-EU 7-10K /LXP 3-6KHybrid/ GEN-LB-EU 3-6K /SNA 3000-6000 / LXP 3600ACS (SQ-POD) 3600 / SNA12K

InverterProtocolSetting

CANProtocol
PYLON

Read

PYLON
GROWATT
VICTRON
SCHNEIDER
LUXPOWER
SRD
SMA
GOODWE
STUDER
PV
JINLANG
SENERGYINV
TBB_LITHIUM
Megarevo

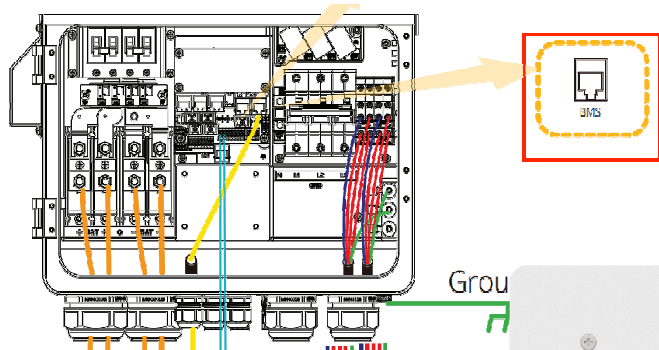
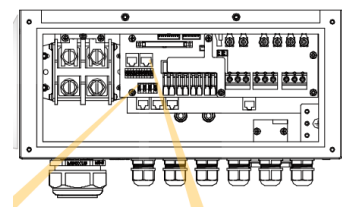
Hardware connection

SUNSYNK

LFP51.2KW、10.5KWH51.2V

Signal phase

three phase



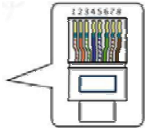
RS 485 CAN

Meter_CON Parallel_A Parallel_B DRMs

RS 485: RS 485 port for battery communication.
CAN: CAN port for battery communication.

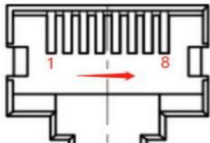
Definition of RJ45 Ports

No.	Color	RS485	Meter	Modbus Port	DRM
1	Orange&White	485_B	Meter-485_B	Modbus-485_B	DRM1/5
2	Orange	485_A	Meter-485_A	Modbus-485_A	DRM2/6
3	Green&White	-	GND_COM	GND_485	DRM3/7
4	Blue	CAN-H	Meter-485_B	-	DRM4/8
5	Blue&White	CAN-L	Meter-485_A	-	REF-GEN/O
6	Green	GND_485	GND_COM	GND_485	GND_L/O
7	Brown&White	485_A	Meter-485_A	Modbus-485_A	Net1_7
8	Brown	485_B	Meter-485_B	Modbus-485_B	Net1_7

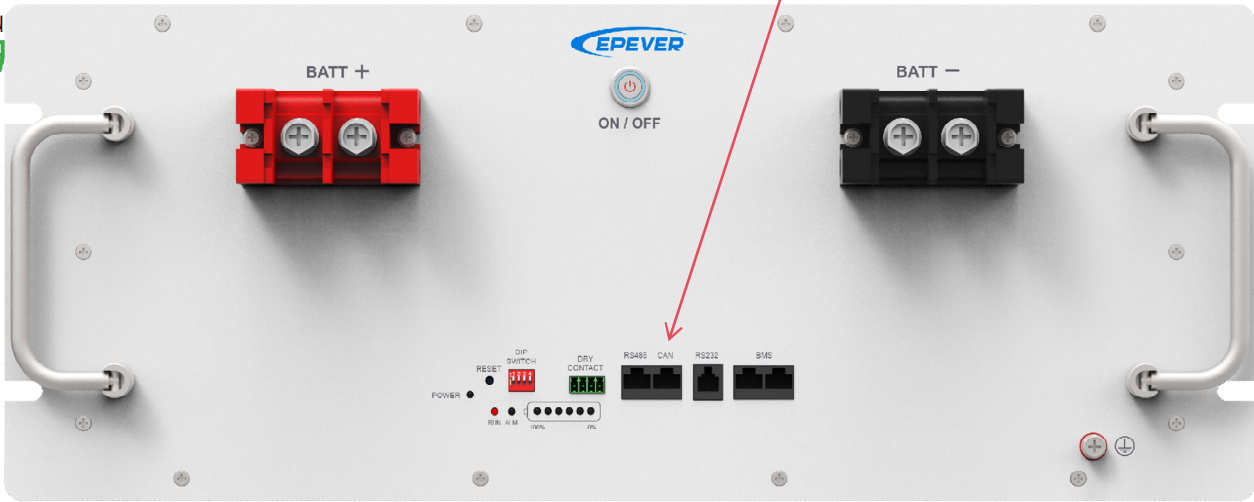


- The CAN/RS485 communication pin is defined as follows. The RJ45 communication port is used to connect the lithium battery to the inverter host.

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(RJ45)



Protocol selection

select "Pylon" from both battery and Inverter CAN

SUNSYNK

LFP51.2KW、10.5KWH51.2V

Brand	Model	48V Storage Inverter	RS485 or CAN	Inverter Setup	Notes
SolarMD	SS4074	✓	CAN	0	To be used with V2 Logger http://solarmd.co.za/inverter-compatibility-solarmd/sunsynk-and-solar-md/
	SS4037			0	
	SS202			0	
	SS4143			0	
	SS4083			0	
	SS214			0	
PYLON	US2000B	✓	CAN	0	"0" for CAN "12" for RS485
	US3000		RS485	12	
	US2000C		CAN	0	
	US3000C		RS485	12	
	UP5000		CAN	0	
	US5000		RS485	12	
	Force L1		CAN	0	
	Force L2		RS485	12	
			CAN	0	
			RS485	12	

InverterProtocolSetting

CANProtocol

PYLON

Read

PYLON

GROWATT

VICTRON

SCHNEIDER

LUXPOWER

SRD

SMA

GOODWE

STUDER

PV

JINLANG

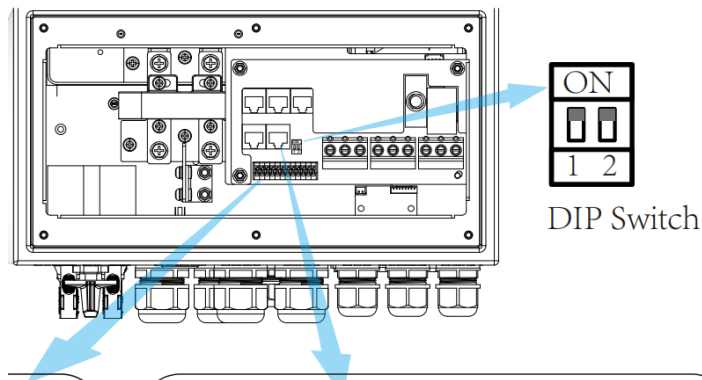
SENERGYINV

TBB_LITHIUM

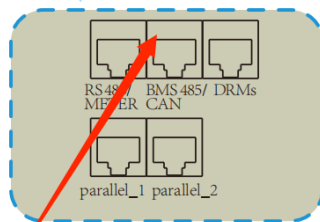
Megarevo

Hardware connection

Deye Sun-SG 3-6K



DIP Switch



RS 485/METER: RS 485 port for meter communication.

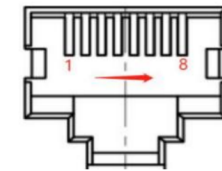
BMS 485/CAN: BMS 485 port for battery communication.

V Coil
Neutral
Earth
Bond

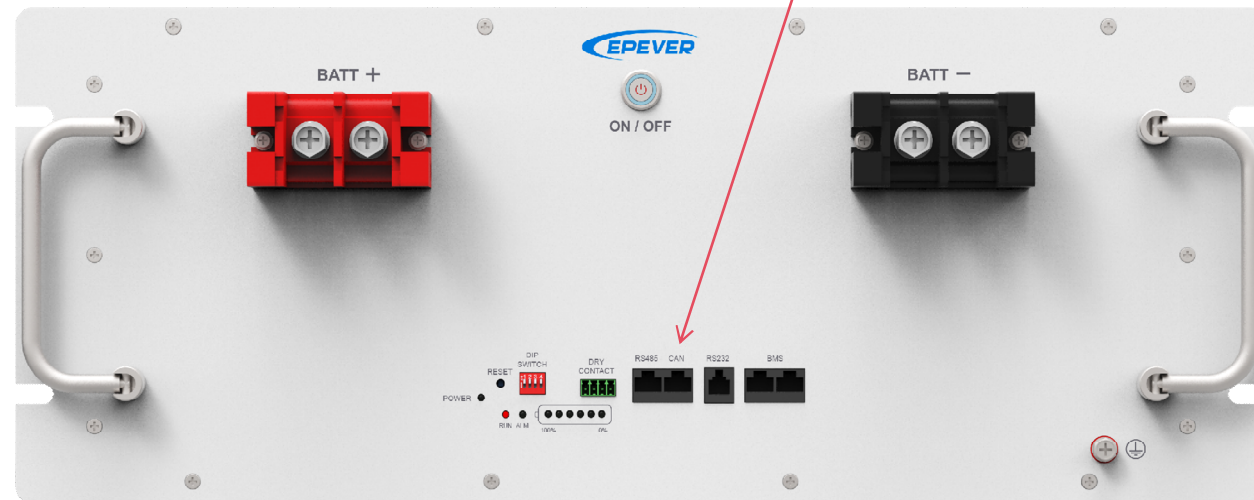
LFP51.2KW、10.5KWH51.2V

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(RJ45)



Protocol selection

Select "Pylon" from both battery and Inverter CAN

Deye Sun-SG 3-6K

VICTOR LHM

LFP51.2KW、10.5KWH51.2V

PRODUCTS

SUN-3.6/5/6/7.6/8K-SG01LP1-EU, SUN-5/6/7.6/8K-SG01LP1-US, SUN-3.6/5/6K-SG03LP1-EU, SUN-3/3.6/5/6K-SG04LP1-EU, SUN-3.6/5/6/7.6/8K-SG05LP1-EU, SUN-5/6/8/10/12K-SG04LP3-EU, SUN-12/14/16K-SG01LP1-EU

Battery list

Brand	Model	RS485 or CAN	Inverter Setup
BYD	BYD Battery-Box LV Flex Lite	All CAN protocol set to "00"	00
Deye	SUNB-5.0-G01-48-PC SE-G5.1 PRO/A1-W5.1/RW-M6.1		
DYNESS	B4850/POWERBOXF/A48100		
UZE ENERGY	L051100-A/L051100-A1/ L051100-B/L051100-D		
AOBOET	Uhome-LFP 5000/Uhome-LFP 2400		
Alpha Ess	M4856-P/SMILE BAT		
KODAK	FL5.2		
TOPBAND	TB51100F-T110/TB51120-T110		
Shoto	SDC-BOX5(5.12KWH)		
DOWELL	IPACK C3.3/IPACK C6.5/IPACK C10		
Giter	G2500-48V/G5040-48V	CAN	00
CF Energy	CFE2400/CFE5100/CFE5100S		
Wesco	4K4 LV, 5K3 LV		
PYLON	US2000B/US3000/US2000C/US3000C/ UP5000/US5000/Force L1/Force L2		

InverterProtocolSetting
CANProtocol
PYLON
PYLON
GROWATT
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SENERGYINV
TBB_LITHIUM
Megarevo

How to use battery software

BMS can communicate with a computer PC through RJ11 using RS232 port to read parameters

https://drive.google.com/drive/folders/1Was3H8GDECUBFDfHuMhxvrfccUPxvu0Q?usp=drive_link



PBmsLVToolsV0.42 Protocol: BS-PACE-232-BP_V1.0

RealTimeMonitor ParallerMonitor SaveRecord ExportRecord ParamSetting SystemSetting Setting Tools

BatteryInfo

TotalVoltage: 0 V
Current: 0 A
SOC: 0 %
SOH: 0 %
RemainCapacity: 0 mAh
FullCapacity: 0 mAh
CycleTimes: 0
IndV1: 0 V
IndC1: 0 A

CurrentPACK

PACK: 1
Host: 0

Temperatures

Title	Temperature
TCell1	0.0
TCell2	0.0
TCell3	0.0
TCell4	0.0
MOS_T	0.0
ENV_T	0.0

SystemStatus(Only read)

CHGMOS DSGMOS
CHGCurValid Heating
DSGCurValid ACin
LimitCurrent Fully

SingleBatteryVoltages

Number	Voltage(mV)	Balanced
1	0	
2	0	
3	0	
4	0	
5	0	
6	0	
7	0	
8	0	
9	0	
10	0	
11	0	
12	0	
13	0	
14	0	
15	0	
16	0	

MaxVolt: 0 mV VoltDiff: 0 mV
MinVolt: 0 mV

SwitchControl

CHG OFF DSG OFF
Alarm OFF LED OFF
Limit OFF SysLock OFF
ForcedSleep

WarningStatus
无

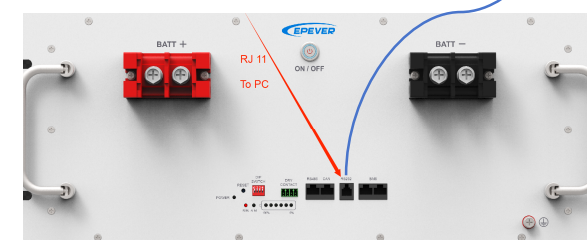
ProtectStatus
无

MalfunctionStatus
无

EPEVER 汇能精电

更改语言 123456 Password

02/18/2025 00:57:15 Firmware: BMS S/N: PACK S/N: English No Communication



BMS can communicate with a computer PC through RJ11 using RS232 port to read parameters

PBmsLVToolsV0.42 协议类型: HS_PACE_232_BP_V29

实时监控 并机监控 存储信息 导出记录 参数设置 **系统设置** 软件设置 工具

显示隐藏内容 ☐

电压(mV)

电压基准 0 校准

总电压 0 校准

电流(mA)

充电电流 (1000-60000mA) 0 校准 复位

零点电流 0 校准

放电电流 (1000-60000mA) 0 校准 复位

串数设置

电池串数 0 写入

充电电流设置

启动电流(A) 0 读取 写入

限流档位 ☐ Low 写入

间歇式充电设置

间歇式充电门限 写入

电量(mAh)

剩余容量 0

满充容量 0

充放电循环

循环次数 0 写入

生产信息

BMS生产信息 写入

PACK生产信息 写入

逆变器协议设置

CAN协议 派能

485协议 派能

读取 写入

选择这个菜单并连接
电池后可以选择通讯
协议

下拉菜单可以选择协
议

Monitor SaveRecord ExportRecord ParamSetting. **SystemSetting**

Show Hidden

Cycle

CycleTimes 0 Write

ProductInfo

BMS ProductInfo Write

PACE ProductInfo Write

InverterProtocolSetting

CANProtocol PACE_CAN

485Protocol PACE_485

Mode 手动

Read Write