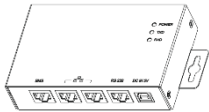


The AX Li Com Box enables communication between the EFFEKTA AX M1 4/5kW, AX K1 4/5kW and AX P1 3000-48 inverter and Pylontech US2000 / US 3000 / C lithium batteries.

1. Package Contents

Before installation, please inspect the unit. Be sure that nothing inside the package is damaged. You should have received the following items inside of package:

AX Li Com Box Package Items:



AX Li Com Box



RJ45 cable (black)



RS232 cable (gray)



Quick Guide



Power Adapter



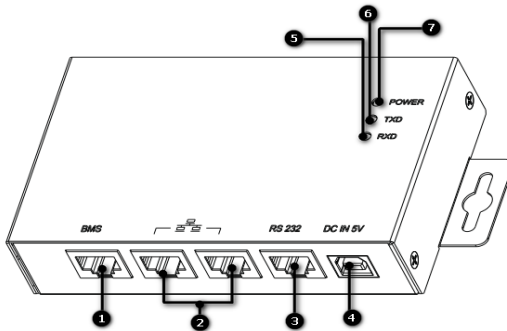
USB charging cable



RS485-USB cable*

* The supplied RS485-USB cable is custom made with a built-in-converter.

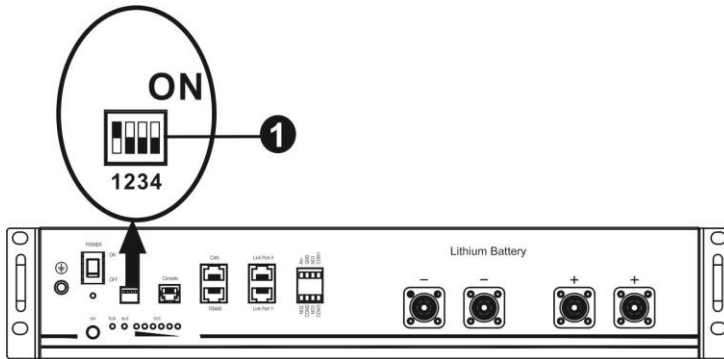
2. Product Overview



- ❶ RS485-BMS port (Refer to section 3 for the details).
- ❷ RS485-Monitor port (Refer to section 4 for the details).
- ❸ RS-232 port
- ❹ 5V DC input
- ❺ RS232 RXD LED
- ❻ RS232 TXD LED
- ❼ Power indicator

3. Lithium battery communication configuration

ADD Switch: There are 4 ADD switches are to define different baud rate and battery group address. If switch position is turned to bottom for "OFF" position, it means "0". If switch position is turned to upper for "ON" position, it means "1".



- Dip 1 must be set to "ON" (baud rate 9600).
- Dip 2, 3 and 4 are used to set up the battery group address. Further information can be found in the manual for the Pylontech US 2000 lithium Battery.

Note:

- Only the AX M1 4000/5000-48 and AX K1 4000/5000-48 inverter with the firmware version xx.40 or higher can communicate with Pylontech batteries via the AX Li Com-Box.
- If there is more than one battery group, the HV device (hub) is also required. In this case the AX Li COM Box must be connected to the Hub instead of the batterie (Pylontech manual, page 37).

4. Interface Configuration



RS485-BMS RS485-Monitor RS-232 5V DC

RS485-BMS pin configuration on AX Li Com Box:

Pin	Function
1/2/3	
4	RS-485 - B
5	RS-485 - A
6/7	
8	GND

RS485-Monitor Pin Configuration

Pin	Function
4	RS-485 - B
5	RS-485 - A
8	GND

RS232 Pin Configuration:

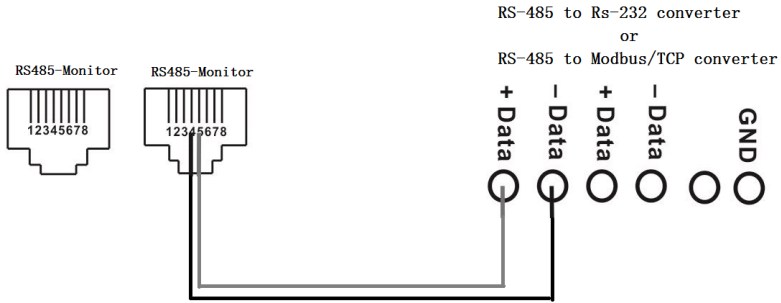
Pin	Function
1	Txd
2	Rxd
8	GND

USB spec

Voltage	5V DC
Current	500 mA

5. USB Converter wiring

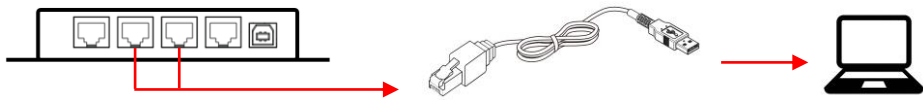
First, please use RS-485 to USB converter as media converter between AX Li Com box and computer. Below is the wiring connection between RJ45 and media converter:



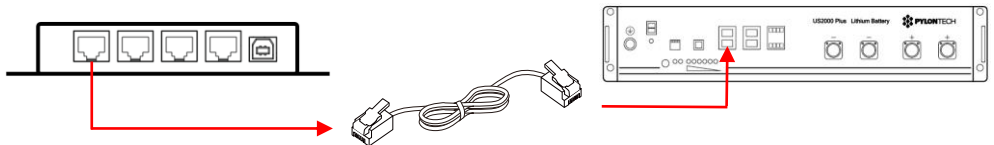
6. Installation and Operation

Install this box after configuration with inverter and lithium battery by following the steps below.

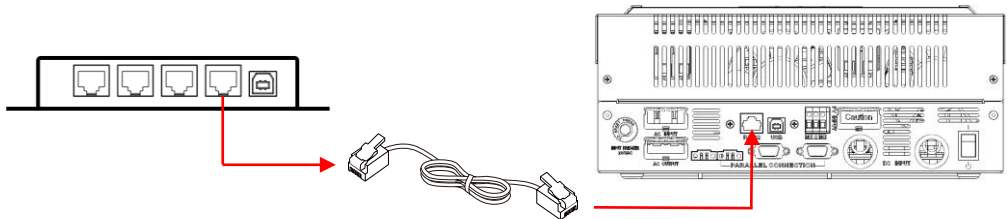
1. Use the RS485 USB cable with converter to connect the AX Li Com Box and the PC.



2. Use the included RJ45 cable (black) to connect the AX Li Com Box (RS485-BMS) and the RS 485 connection of the lithium battery.



3. Use the supplied RS232 cable (gray) to connect the AX Li Com-Box and the AX inverter.



4. Use supplied RS232 cable (gray) to connect AX Li Com box and the inverter.



5. Switch on the lithium battery.
6. Switch on the inverter.
7. If necessary, start the monitoring software

If all cables have been connected correctly and communication between the inverter and the battery has been successfully established, a symbol as shown on the right will flash on the LCD:



7. WatchPower software setting

1. Open WatchPower
2. Select "WatchPower Configuration" from menu bar
3. Select "Serial Modbus setting"
4. Select COM port and make the following settings

COM Einstellung:

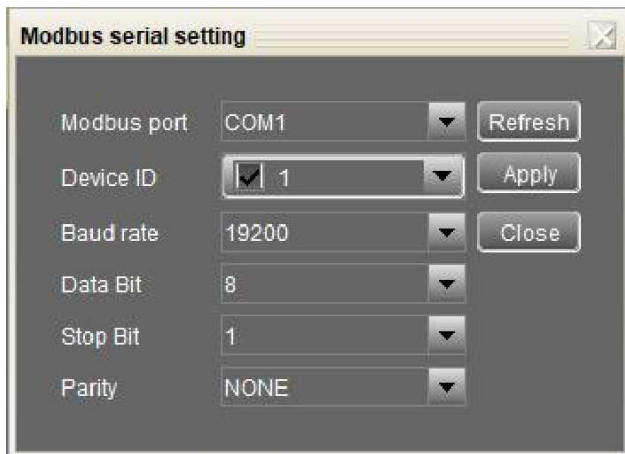
Device ID: 1 (check mark) may only be assigned once

Baud rate: 19200

Data bit: 8

Stop bit: 1

Parity: NONE



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