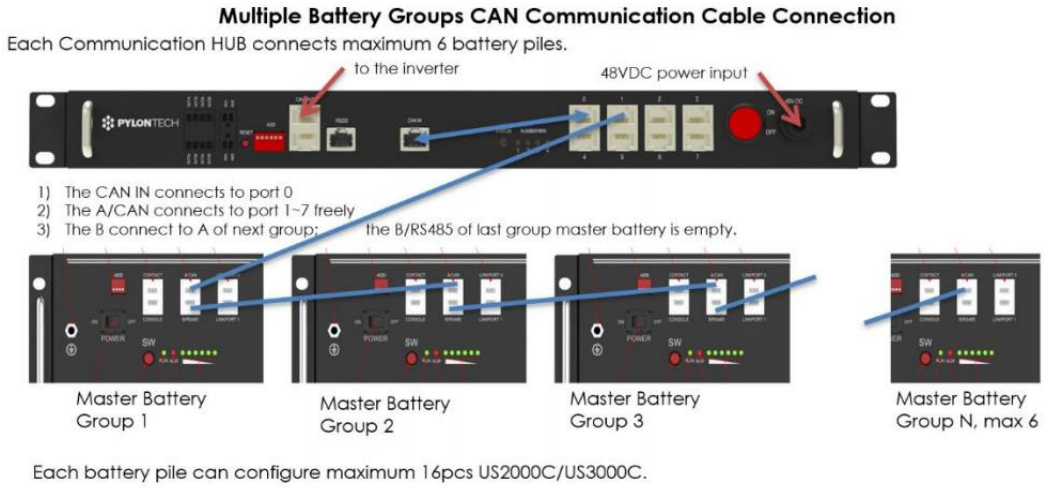
# C version battery connection instructions

The C version can have upto 16pcs per group.

Detailed configuration for C type:

1. The wiring diagram of US3000C and HUB is as below.




2. Clarification of the communication cables:

a. Communication cable between Master Batteries(Group(GP) 1 to Group 2, GP2 to GP3 and so on) - standard 8PIN direct PIN communication cable.

*You can use below red square comm. cable within the cable kits provided:

For the external cables, the length shall less than 3 meters.

| SN of RJ45cable | Mark | Pin | |
|---|---|---|---|
| WI0SCAN30RJ1 | With blue mark: Battery-Inverter | Pin1~3: NULL<br>Pin4~8: pin to pin | For connection to inverter |
| WI0SCAN35RJ3 | With silver mark: Battery-Battery | Pin1~8: pin to pin | For parallel connection between master batteries |

b. Communication cable between Group 1 Master Battery to LV-HUB - It`s a customized ethernet cable, with Pin1~Pin3 shall be NULL(disconnect), Pin4 ~ Pin8 are Pin to Pin.
*You can use below red square comm. cable within the cable kits provided:

| SN of RJ45cable | Mark | Pin | |
|---|---|---|---|
| WI0SCAN30RJ1 | With blue mark: Battery-Inverter | Pin1~3: NULL<br>Pin4~8: pin to pin | For connection to inverter |
| WI0SCAN35RJ3 | With silver mark: Battery-Battery | Pin1~8: pin to pin | For parallel connection between master batteries |

c. The communication cable between HUB Port 0 to HUB Port CAN IN - a standard 8PIN direct PIN ethernet cable.

* Remember make sure all ADD switch to all module is at OFF position(pysically is UP), see below red square.

For instance:

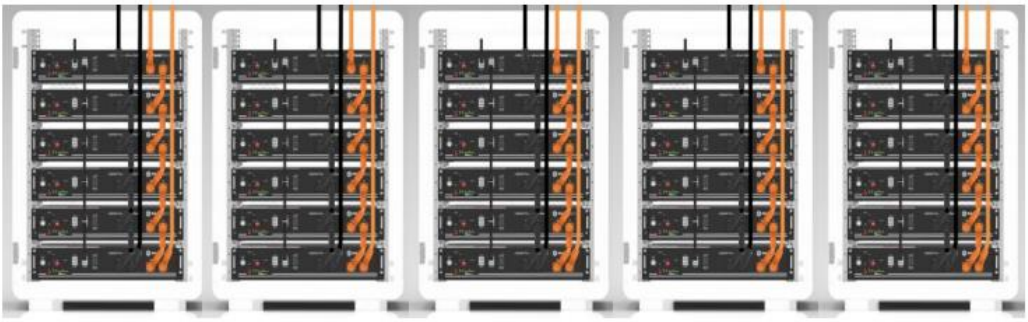
| Dip1 | Dip2 | Dip3 | Dip4 | The corresponding position of switch | Status |
|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 |  | RS485:115200<br>CAN terminal resistance: connected |
| 1 | 0 | 0 | 0 |  | RS485:9600<br>CAN terminal resistance: connected |
| 0 | 1 | 0 | 0 |  | RS485: 115200<br>CAN terminal resistance: NONE |

3. After you select the correct communication cable to connect in between different devices, strickly follow below instructions **especially step 4 to step 7, which is very easy to mess up, so please follow one by one.**

By CAN:

Connect power cable first:

1) each pair of cable hold max 100A constant current. Connect enough pairs of cable based on calculation of system current.
2) Suitable protection breaker between battery system and inverter is required.
3) connect power cable of LV-HUB



4) Make sure all dipswitch is X0XX, then turn ON batteries.
5) After all batteries running and buzzer of master battery in group1 rings 3 times. Means all groups are online.
6) Change the dip switch of **master battery in group1** to X1XX. Then connect communication cable between LV-HUB and master battery in group 1.
7) Then turn ON LV-HUB.

Detailed information please refer to manual of LV-HUB.

By RS485: DO NOT need LV-HUB.

Connect power cable first:

1) each pair of cable hold max 100A constant current. Connect enough pairs of cable based on calculation of system current.
2) Suitable protection breaker between battery system and inverter is required.

3) Make sure all dip switch of master batteries are R0XX, then turn ON batteries.

   R: is the baud rate of RS485 needed, all master batteries shall be the same.
4) After all batteries running and buzzer of master battery in group1 rings 3 times. Means all groups are online.

The interruption of each RS485 command shall at least ⩾1s.

**Multiple Battery Groups RS485 Communication Cable Connection**

Max 6 groups
1) The A/CAN of 1st group/master battery connects to inverter or EMS(pin: 7A, 8B, DO NOT connect other pins)
2) The B connect to A of next group; the B/RS485 of last group master battery is empty.

Master battery Group 1. | Master battery Group 2 | Master battery Group 3 | Master battery Group N,max 6.

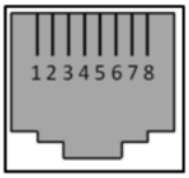
**Pin definition:**

**Link Port 0, 1**

for communication between multiple parallel batteries.

**Definition of RJ45 Port Pin**

| | A/CAN | B/RS485 |
|---|---|---|
| Pin1 | **These pins shall be NULL.** | |
| Pin2 | **If not, may influence communication** | |
| Pin3 | **between BMS and inverter.** | |
| Pin4 | CAN-H | CAN-H (single group) |
| Pin5 | CAH-L | CAN-L (single group) |
| Pin6 | CAN-GND | CAN-GND (single group) |
| Pin7 | 485A | 485A |
| Pin8 | 485B | 485B |




RJ45 Port


RJ45 Plug