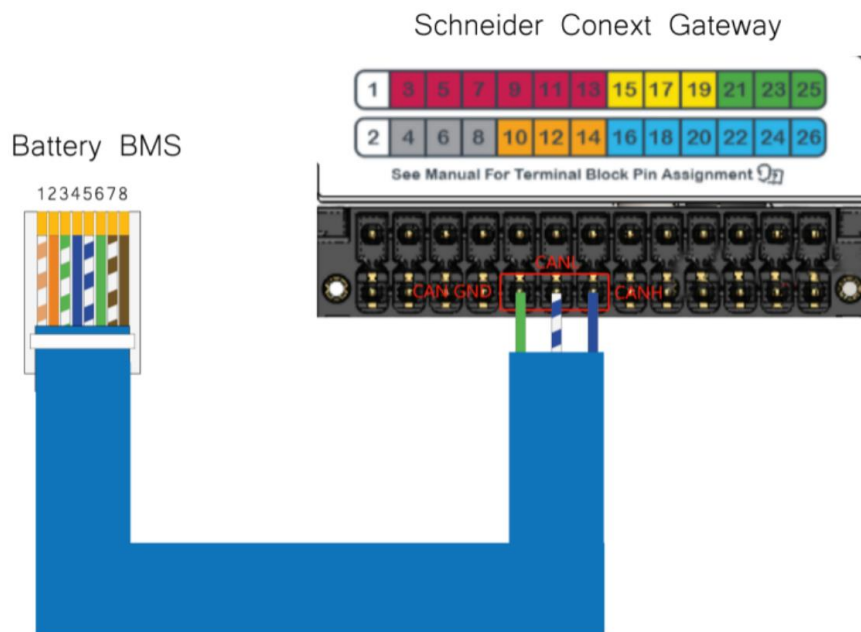


Beaver Server Rack Battery / Schneider Inverter Communication

Step 1 – Set up communication with the Context Gateway.

The first step is preparing the communication cable between the Schneider Gateway device and the BMS of the battery. To do so, you will first need to prepare the cable as follows:

- Take a standard CAT cable.
- Connect pin 2 from the cable to pin 10 on the Gateway port.
- Connect pin 5 from the cable to pin 12 on the Gateway port.
- Connect pin 4 from the cable to pin 14 on the Gateway port.



Step 2 –Set up the ADD.

- Master battery

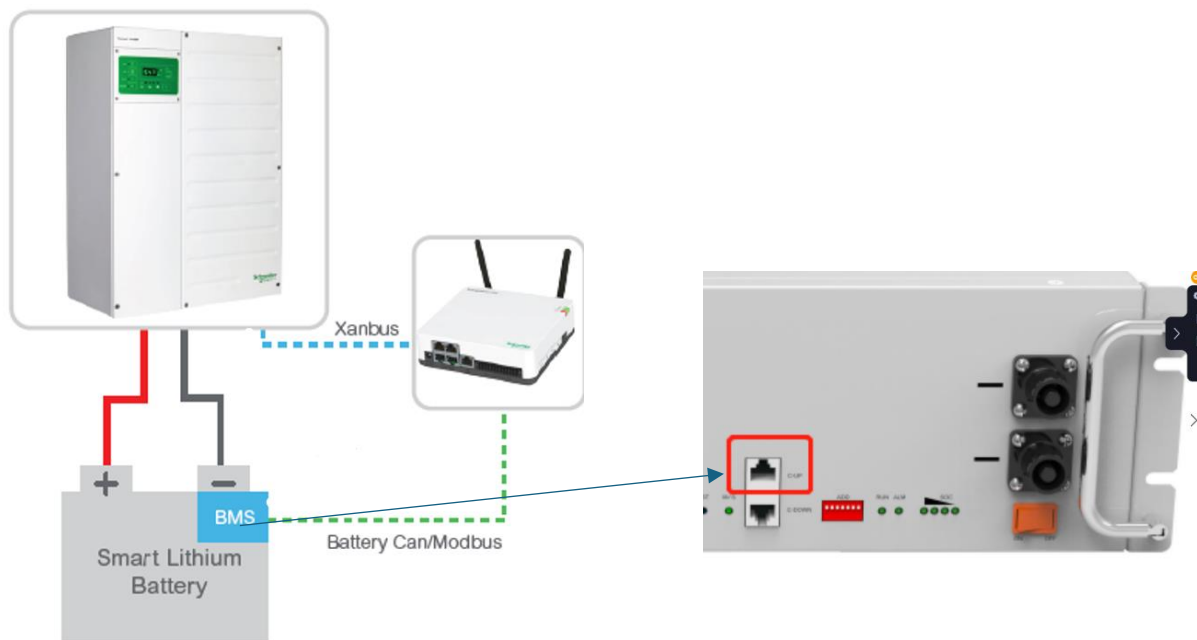


- Slave battery



Step 2 –Ensure your Schinder unit is wired correctly.

The final connection between between the inverter, gateway and battery should look like the following:



Step 3 Adjust the inverter settings.

Step 1: logon on to your XW Schinder Account

InsightLocal Version: v1.16 | Build number: 4 |


Dashboard **Devices** Events Setup About

2 devices Display List Icons

Device Overview
Inverter/Chargers
Other Devices


XW6848-21 0 Online

Operating Mode	Operating
Inverter Status	AC Pass Through
Charger Status	Constant VI
Unit Configuration	Split Phase Master
AC Load Active Power	-38 W
AC Load Voltage	239.4 V
AC Load Frequency	59.99 Hz
AC1 Input Power (W)	4320 W
AC1 Voltage	240.32 V
AC1 Frequency	59.99 Hz
AC2 Active Power	0 W
AC2 Voltage	0 V
AC2 Frequency	0 Hz
DC Power	4125 W



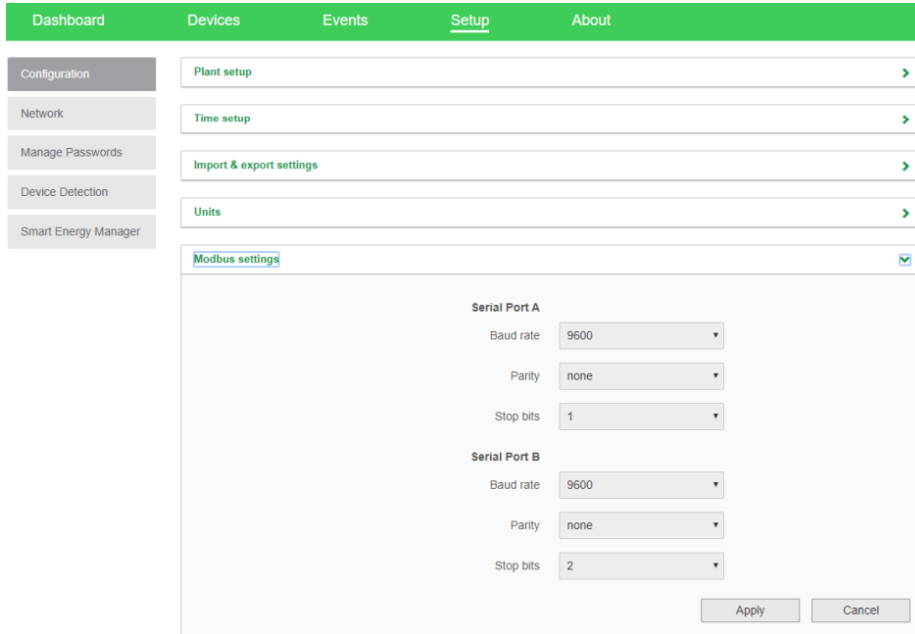
SECAN_BMS 20 Online

Voltage	48 V
Temperature	20.00 °C
State of Charge	95 %
State of Health	100 %
Device Number	0
Device Name	BMS
Device Association	House Battery Bank 1



Step 2: Set up the BMS

- After successful login, click Setup along the top bar.
- Click Configuration on the left-hand side, and then click Modbus settings.
- Configure the Modbus settings. This should be same as the Modbus BMS settings.



d. After configuring the Modbus settings, click Device Detection on the left-hand side.

e. Under Detect Devices, enter the address range of the Modbus device and click Detect.

This should trigger device detection.

f. On successful device detection, the number of devices will be shown. Navigate to Devices and click Device Overview. On successful communication, various user information is available.

* At this point the Schinder unit should be able to recognize the BMS and the screen will show as follows. If the BMS is not recognized please attempt the following:

- Ensure both Gateway and Schinder files are up to date.
- Double check the wiring connections in steps 1 and 2.
- If you still connect establish connection, please email hello@solarpowerstore.ca pictures of your set up and our team will assist with the debugging!

*

Step 3: BMS Association

- Click the BMS device to open BMS Status information.
- Check the status information to validate various data parameters.



Modbus Address	3	Battery Type	SECAN_BMS
Device Association	House Battery Bank 1	Device Name	BMS
Device Number	0	Current	20 A
Voltage	48 V	Maximum Discharge Current	-25 A
Maximum Charge Current	25 A	Maximum Charge Voltage	54 V
Minimum Discharge Voltage	42 V	Force Charge Low SOC	0
Force Charge Request Calibration SOC	0	Charge Permitted	1
Discharge Permitted	1	State	SelfCheck
Temperature	20.00 °C	State of Charge	95 %
State of Health	100 %	Discharge Over Current Fault	0
Charge Over Current Fault	0	Under Temperature Fault	0
Over Temperature Fault	0	Under Voltage Fault	0
Over Voltage Fault	0	Cell Voltage Difference Too High Fault	0
Communication Error Fault	0	System Error Fault	0
Discharge Current High Warning	0	Charge Current High Warning	0
High Temp Warning	0	Low Temp Warning	0
Voltage High Warning	0	Voltage Low Warning	0
Cell Voltage Difference Too High Warning	0	Communication Error Warning	0

- Click Configuration and then click Device Association

The screenshot shows a web interface with a green navigation bar containing 'Dashboard', 'Devices', 'Events', 'Setup', and 'About'. The 'Devices' tab is active. On the left, there are menu items for 'Device Overview', 'Inverter/Chargers', and 'Other Devices'. The main content area shows 'Other: BMS 0 Change Selection' with 'Status' and 'Configuration' tabs. The 'Configuration' tab is selected. Below this, there are 'Basic' and 'Advanced' toggle buttons. The 'BMS_DEV' section is expanded, showing a 'Device Association' dropdown menu with 'House Battery Bank 1' selected. 'Apply' and 'Reset' buttons are at the bottom right.

- d. In the Devices section click Inverter/Chargers. Click the respective XW Pro and click Configuration > Associations menu set the Battery Association to same bank as BMS.

The screenshot displays the configuration interface for an XW Pro inverter. The 'Associations' menu is expanded, showing four settings:

AC1 Association (Grid)	Grid 1	AC Output Association (Loads)	AC Load 1
AC2 Association (Generator)	Generator 1	Battery Association	House Battery Bank 1

Buttons for 'Apply' and 'Reset' are located at the bottom right of the Associations section.

Note: the beaver battery can use any BMS protocol to establish communication as it will automatically detect. However we recommend setting the BMS protocol to "Pylontek 3x force L2"