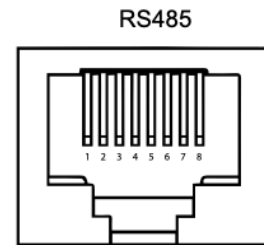
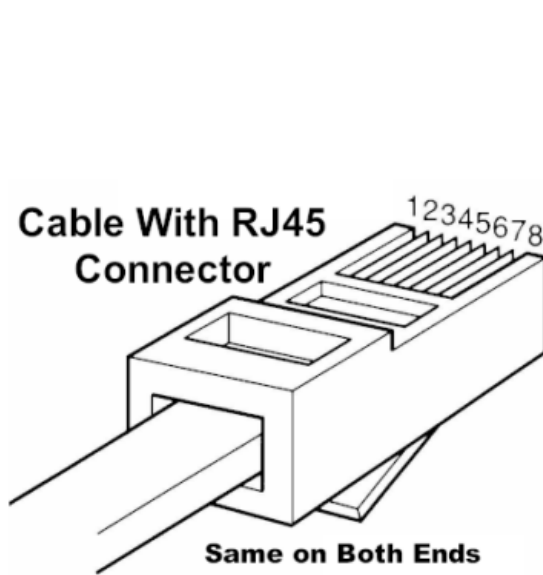


CANBAT



CANBAT TECHNOLOGIES INC

CANBAT CLI120-48 / Schneider XW Pro

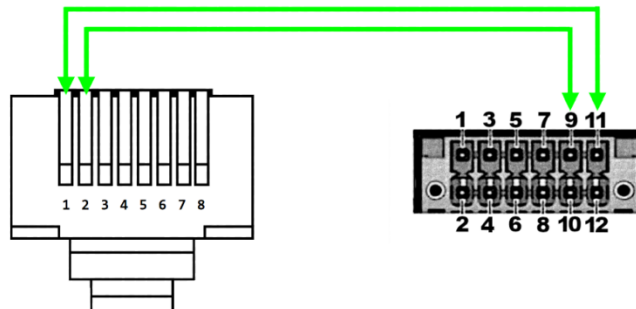


RS485 port

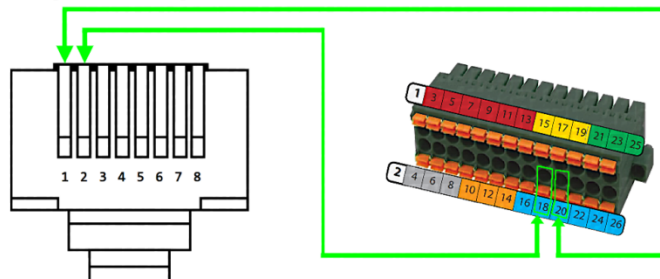
Pin No.	Definition
1	Inverter RS485B
2	Inverter RS485A
3	NC
4	NC
5	NC
6	NC
7	BMS debug RS485A
8	BMS debug RS485B

RS485 Modbus Communications Pinouts and Wiring Diagrams for RJ45 Connector. Please take note that the connector is depicted in the diagrams below with its end pointing away from you.

- Insight Home**



- InsightFacility & Gateway**



1. Start your XW Pro
2. Make sure that the rest of the Xanbus devices in your system are connected to the Xanbus network
3. Follow the instructions in the Insight Home manual to connect your computer to the Insight Home's WIFI access point and log in to Insight Local (the Insight Home, Insight Facility or Gateway internal web application) using the admin user and password.
4. In InsightLocal:
 - a. Put the XW Pro into Standby.
 - b. Click "Setup" in the green top horizontal menu
 - c. Click "Configuration" in the left-hand vertical menu.
 - d. Click "Modbus settings"
 - e. In Modbus settings: Set the Baud Rate to 19200; Parity to "none"; Stop bits to 1; Error limit to 3; Timeout (ms) to 1000
 - f. Click Apply

The screenshot shows the 'Setup' page in the Insight Local web application. The top navigation bar is green with 'Dashboard', 'Devices', 'Events', 'Setup' (active), and 'About'. The left sidebar has 'Configuration' (active), 'Network', 'Manage Passwords', 'Device Detection', 'Smart Energy Manager', and 'BMS Setup'. The main content area is titled 'Modbus settings' and contains the following fields:

- Serial Port A: Baud rate (19200), Parity (none), Stop bits (1), Error Limit (3), Timeout (ms) (1000).
- An 'Apply' button at the bottom right.

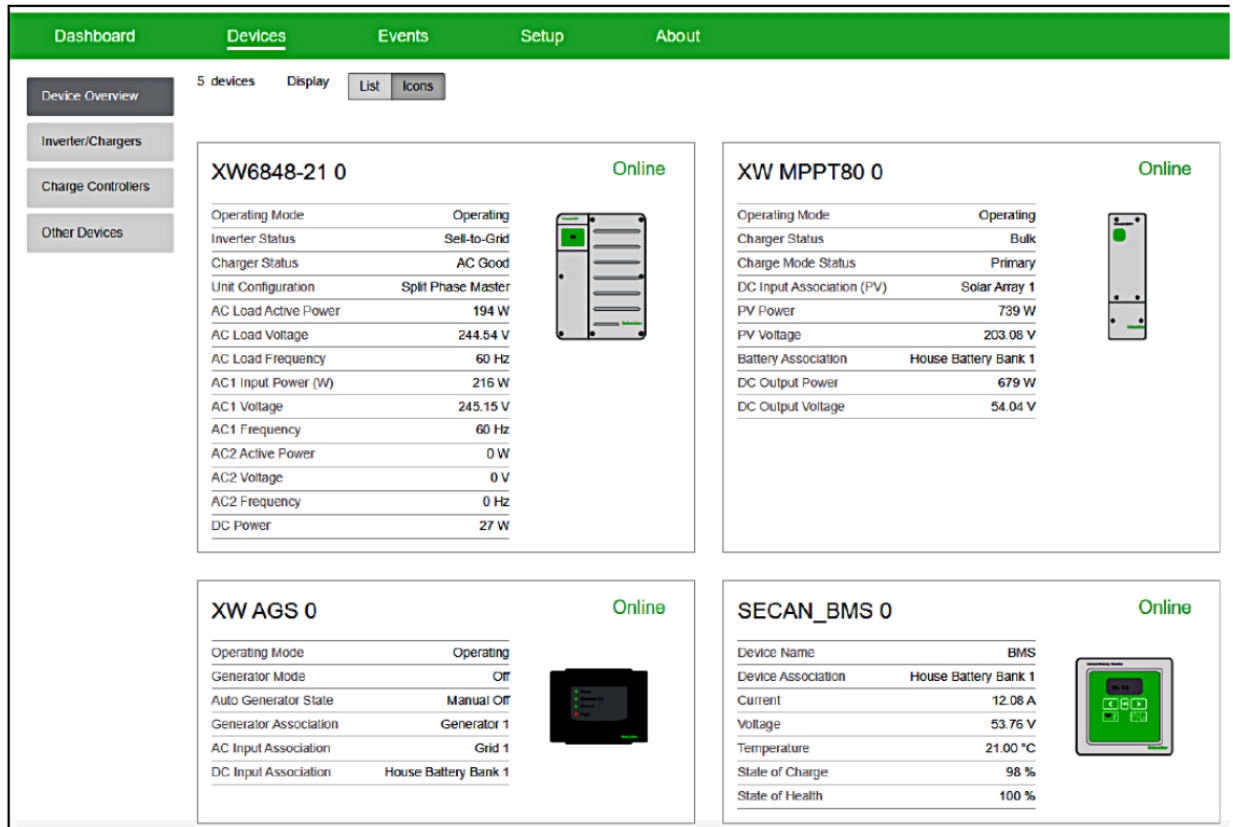
5. Click on device detection
6. Click detect devices (Make sure to set the range from 1-63)

The screenshot shows the 'Device detection' page in the Insight Local web application. The top navigation bar is green with 'Dashboard', 'Devices', 'Events', and 'Setup' (active). The left sidebar has 'Configuration', 'Network', 'Manage Passwords', 'Device Detection' (active), 'Smart Energy Manager', and 'BMS Setup'. The main content area is titled 'Device detection' and contains the following elements:

- A progress bar showing 'Progress: 37%'.
- A 'Detect devices' section with a table:

Port	Range
RS-485-1	1 to 63

7. Click “Devices” in the green, top, horizontal menu. If it is not already selected, click “Device Overview” from the left-hand menu. The Canbat CLI120-48 should show up as “SECAN_BMS_0”



Dashboard **Devices** Events Setup About

5 devices Display List Icons

Device Overview
Inverter/Chargers
Charge Controllers
Other Devices

XW6848-21 0

Online

Operating Mode	Operating
Inverter Status	Self-to-Grid
Charger Status	AC Good
Unit Configuration	Split Phase Master
AC Load Active Power	194 W
AC Load Voltage	244.54 V
AC Load Frequency	60 Hz
AC1 Input Power (W)	216 W
AC1 Voltage	245.15 V
AC1 Frequency	60 Hz
AC2 Active Power	0 W
AC2 Voltage	0 V
AC2 Frequency	0 Hz
DC Power	27 W

XW MPPT80 0

Online

Operating Mode	Operating
Charger Status	Bulk
Charge Mode Status	Primary
DC Input Association (PV)	Solar Array 1
PV Power	739 W
PV Voltage	203.08 V
Battery Association	House Battery Bank 1
DC Output Power	679 W
DC Output Voltage	54.04 V

XW AGS 0

Online

Operating Mode	Operating
Generator Mode	Off
Auto Generator State	Manual Off
Generator Association	Generator 1
AC Input Association	Grid 1
DC Input Association	House Battery Bank 1

SECAN_BMS 0

Online

Device Name	BMS
Device Association	House Battery Bank 1
Current	12.08 A
Voltage	53.76 V
Temperature	21.00 °C
State of Charge	98 %
State of Health	100 %

8. Click “Setup” in the green, top, horizontal menu.
9. Click “BMS Setup” in the left-hand vertical menu.

Select Canbat as the battery type and input the number of battery modules in your battery bank then Click “Apply”.

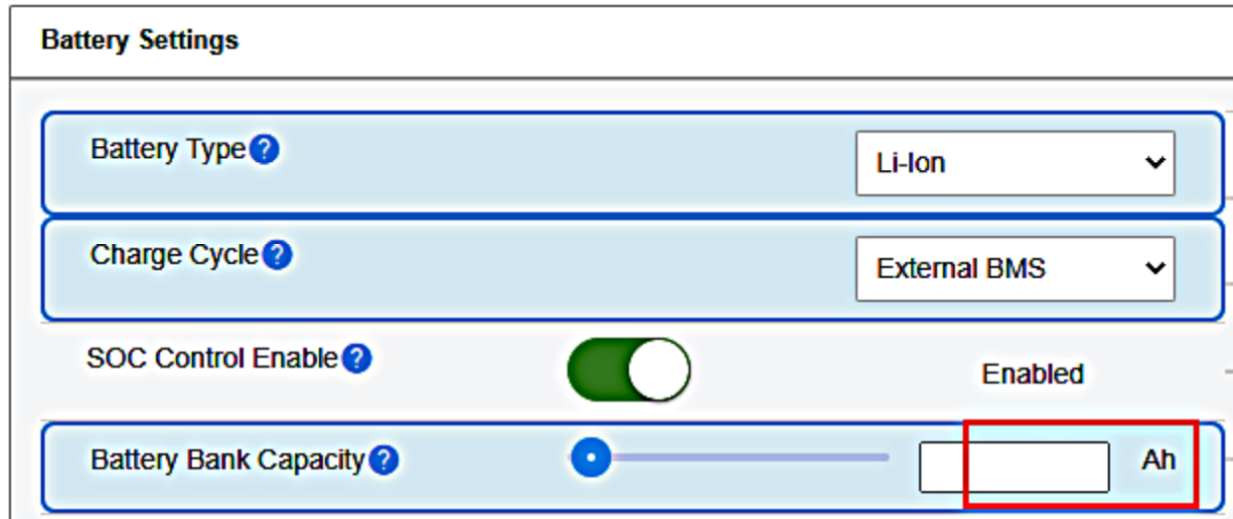
The screenshot shows the 'BMS Setup' page in a web application. The top navigation bar is green with links: Dashboard, Devices, Events, Setup (underlined), and About. On the left, a sidebar contains buttons for Configuration, Network, Manage Passwords, Device Detection, Smart Energy Manager, and BMS Setup (highlighted). The main content area is titled 'BMS Setup' with a green header and a question mark icon. Below the header, it says 'Setup external Battery Management System (BMS)'. There are three input fields: 'Battery Type' with a dropdown arrow, 'Quantity' with a slider and a text box showing '1', and 'Progress' with a green bar at 100%. At the bottom, the 'Status' is 'Successful', and there are 'CLEAR' and 'APPLY' buttons.

Click “Devices” in the green, top, horizontal menu then Click “Other Devices” in the left-hand menu then Click “SECAN_BMS_0” then Click “Configuration” then Click “BMS_DEV” and Set the Device Association to “House Battery Bank 1”. Click “Apply”

The screenshot shows the 'Devices' page in the web application. The top navigation bar is green with links: Dashboard, Devices (underlined), Events, Setup, and About. On the left, a sidebar contains buttons for Device Overview, Inverter/Chargers, Charge Controllers, and Other Devices (highlighted). The main content area is titled 'Other: BMS 0 Change Selection' and has tabs for Status, Events, Configuration (selected), and Firmware. Below the tabs, there is a 'Modbus Settings' section with a dropdown arrow. The 'BMS_DEV' section is expanded, showing 'Device Association' set to 'House Battery Bank 1', 'Device Number' set to '0', and 'Device Name' set to 'BMS'. There are 'Apply' and 'Reset' buttons. On the right, a detailed view of 'BMS 0 Online' is shown, featuring a battery icon and a table of device information.

FGA	
Device name	SP1
Serial number	210KLRED21603210
Unique Identifier	33682112
Bus ID	2
Bus Address	0
Build Number	-

Click “Inverter/Chargers” then select your XWPro then go into Configuration then Go into the “Battery Settings” menu. Enter the total capacity of your Canbat battery bank (just multiply 120 by the number of modules in your battery bank) and “Apply”.



Battery Settings

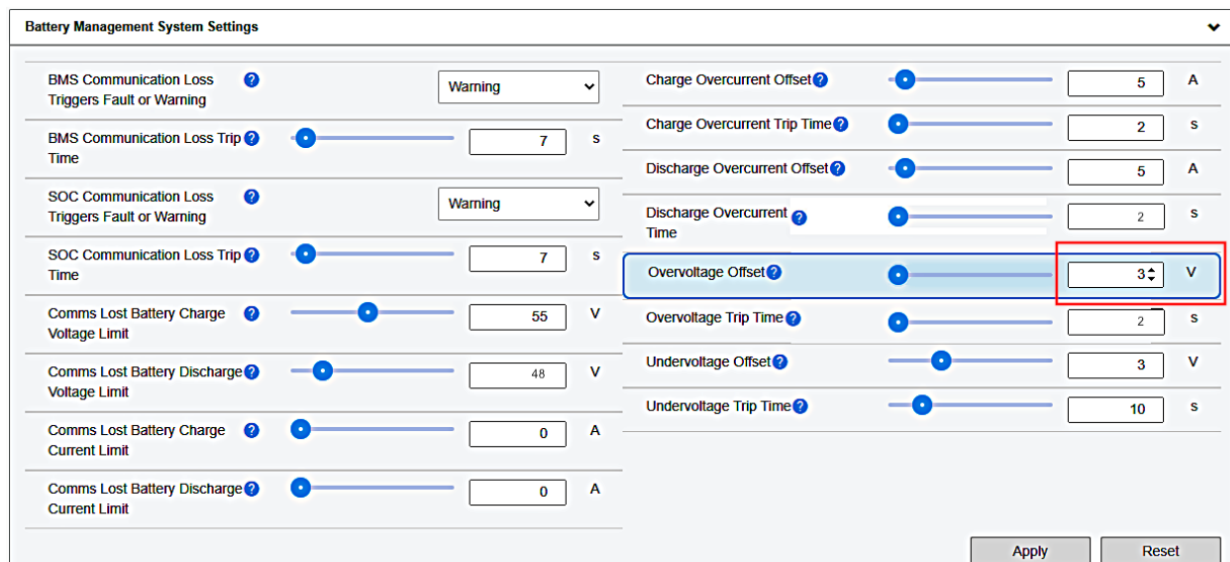
Battery Type ? Li-Ion ▼

Charge Cycle ? External BMS ▼

SOC Control Enable ? Enabled

Battery Bank Capacity ? 0 120 Ah

Go into the “Battery Management System Settings” menu. Set the “Overvoltage Offset” to 3V and “Apply”.



Battery Management System Settings

BMS Communication Loss Triggers Fault or Warning ? Warning ▼	Charge Overcurrent Offset ? 5 A
BMS Communication Loss Trip Time ? 7 s	Charge Overcurrent Trip Time ? 2 s
SOC Communication Loss Triggers Fault or Warning ? Warning ▼	Discharge Overcurrent Offset ? 5 A
SOC Communication Loss Trip Time ? 7 s	Discharge Overcurrent Trip Time ? 2 s
Comms Lost Battery Charge Voltage Limit ? 55 V	Overvoltage Offset ? 3 V
Comms Lost Battery Discharge Voltage Limit ? 48 V	Overvoltage Trip Time ? 2 s
Comms Lost Battery Charge Current Limit ? 0 A	Undervoltage Offset ? 3 V
Comms Lost Battery Discharge Current Limit ? 0 A	Undervoltage Trip Time ? 10 s

Apply Reset

The final step is to take the XW Pro out of standby.

