Brand: Schneider Electric
Type: Solar On Grid String Inverter
Models: Conext CL-20/25 Conext CL-18/25

CONNECTION DIAGRAM

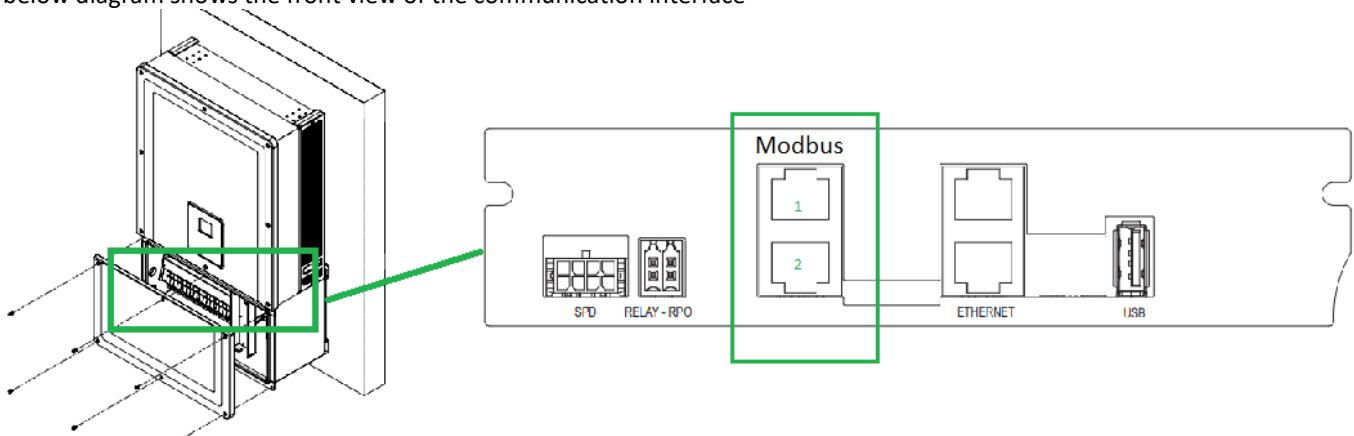The below diagram shows the front view of the communication interface

Figure S1 –Locating Communication card in Schneider Electric

Connection Steps:

- Please unscrew the inverter and check the communication interface as shown in *Figure S1*.
- Connect the RJ45 cables to the RJ45 terminal blocks.
- Cut the LAN Cable on other side
- Connect the wire from PIN 4 of LAN cable to the Data+ and from the PIN 5 to Data-
- Insure connections from the RJ45 Modbus connector to TrackSo IoT Gateway as mentioned in the Table – ST1.
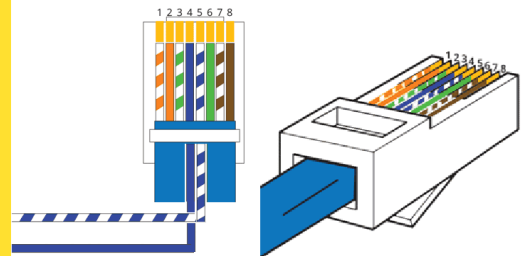- Power the device using 12V Adapter supplied with device.

Port	Schneider Electric Pin No.& Assignment		TrackSo Pin No. & Assignment	
1	4	RS485A	3	D+
	5	RS485B	4	D-
2	4	RS485A	Used for Daisy Chain	
	5	RS485B		

Table ST1 – Schneider Electric RS485 connections with TrackSo IoT Gateway

Inputs	AI-	8
	AI+	7
	DI-2	6
	DI-1	5
RS485	D -	4
	D +	3
PWR	GND	2
	+12V	1

1. White Orange   5. White Blue
2. Orange   6. Green
3. White Green   7. White Brown
4. Blue   8. Brown

GPRS Enabled IoT Gateway for Remote Management

Inverter ID: **1, 2, 3, 4 ….** Continuous numbering starting with 1, **(Range:** 1 to 247)
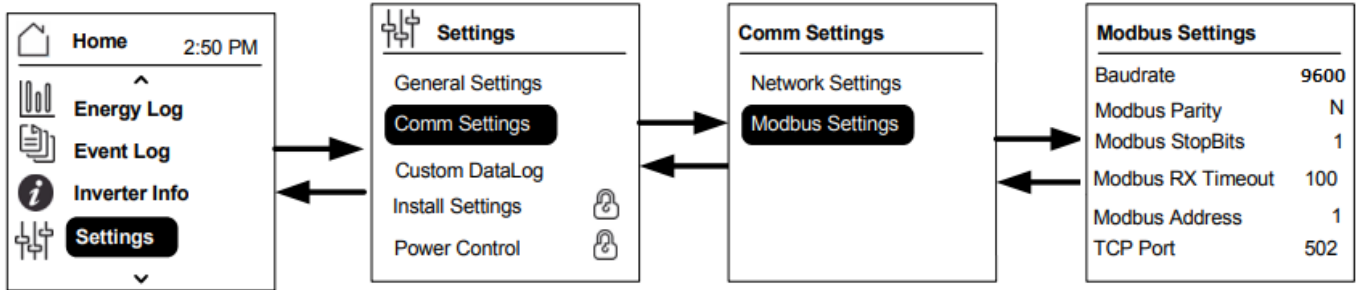Baud Rate: **9600 (Default)**
Data Bits: 8 , Stop Bit: 1 , Parity: None

CONFIGURATION AT THE INVERTER END

SETTING THE BAUD RATE

If you connect multiple inverters via RS485, set the same baud rate on each inverter.   ← **Set the Inverter baud rate to 9600**
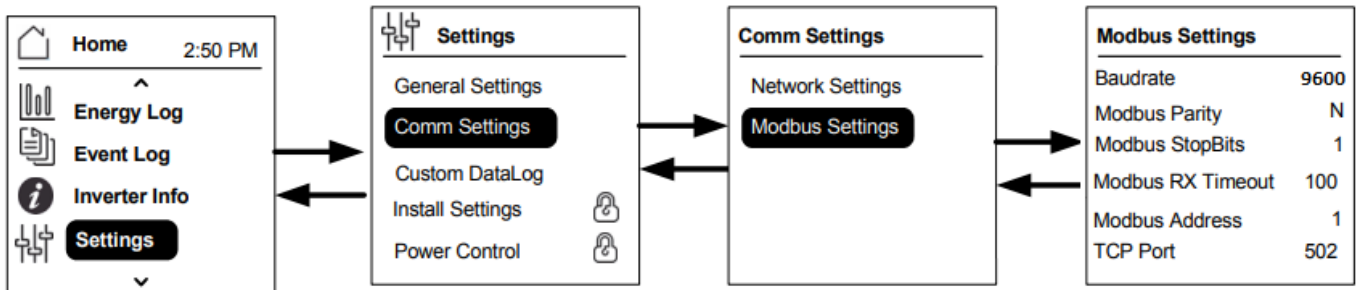

SETTING THE INVERTER ID

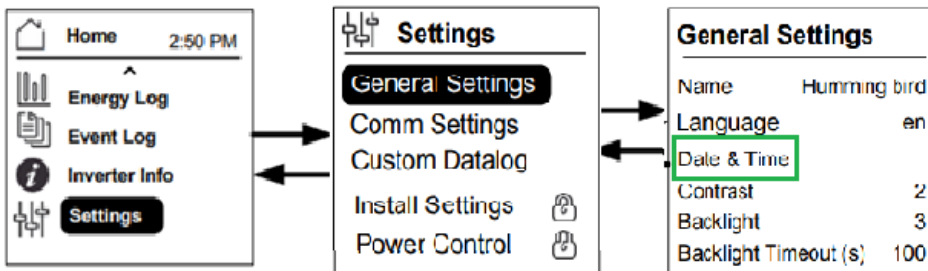The inverter ID is used to identify the inverter in a RS485 connection

- Set a different inverter ID for each inverter in the PV plant. Otherwise, the inverters cannot be correctly identified.
- On the last inverter in the RS485 connection, switch on the RS485 termination resistor.

← **Set correct Inverter Ids**

SET DATE & TIME OF INVERTER

For a precise calculation of the statistics in the inverter itself and in a monitoring system, date and time have to be correct.
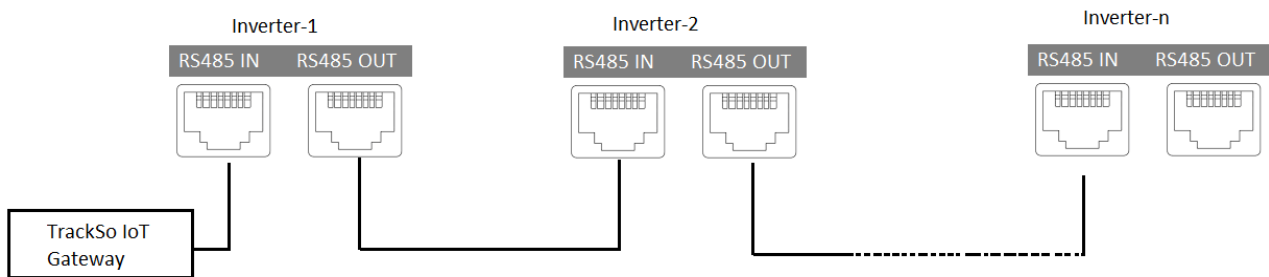

← **Set the Correct Date & Time**

NOTE: The above details are mentioned in the ***Installation & Operation Manual*** for Schneider Electric Inverter on ***Page 104.***

CONNECTING MULTIPLE INVERTERS

The Conext CL inverters can be connected in Daisy chain configuration. In this case both RJ45 connections are used except either on the first or the last units in the network. The end terminator plug for the first or last unit should be connected on the RJ45 connector.

Note: Ensure to use a Modbus Terminator in one of the inverters connected in the network, for proper communication

1. Insure correct connections as detailed in the installation guide.
2. Insert the SIM card.

Push Yellow Nob

Pull the SIM Tray

Place the SIM card In tray Inside

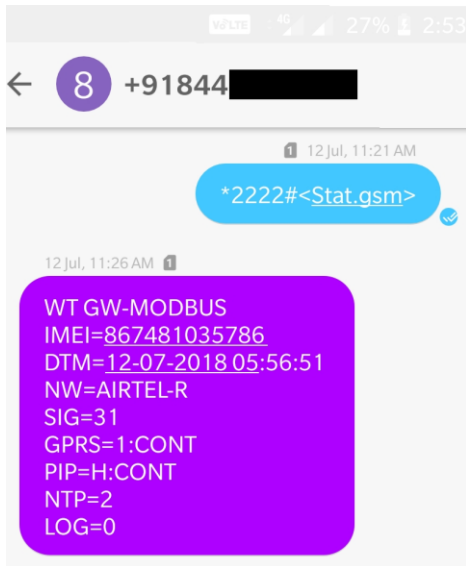Place the SIM Tray in SLOT and Push the Tray

3. Switch on the power to the TrackSo device. (Minimum 12V/1A input is required)
4. Power LED (Red) of TrackSo IoT gateway glows and stays ON.

   NOTE: TrackSo IoT Gateway will only be able to send data if the GPRS network is available at the installed location.

LED	NAME	DESCRIPTION	
GREEN	POWER	Light when Power on the device	
RED	GSM	**LED Status**	**Connection State**
		Flashing (ON for 100ms and OFF for 100ms)	SIM Card not found
		Flashing (ON for 500ms and OFF for 500ms)	Searching for GSM Network
		Flashing (ON for 0.1s and OFF for 2.9s) Once at every 3sec	GSM Network Registered
		Flashing twice at every 3sec	GPRS IP Connected
		Flashing 5times	GPRS IP Sending data
		LED OFF	GSM Fault
GREEN	COM TX	Blink on data transmission in RS485 port	
YELLOW	COM RX	Blink on data reception in RS485 port	

5. To check the exact network status send the following message to mobile number of the device

SMS Command= *2222#<Stat.gsm>	
IMEI	IMEI No. of the data logger (Device Key)
NW	Network
SIGN	Signal Strength out of 31
GPRS	CONT- connected , NC- not connected
PIP	Connected to TrackSo Server or not CONT- connected, NC- not connected
LOG	no. of data points stored in devices incase of no interet

6. If the GSM light starts flashing 5 times then Login to www.trackso.in with your Username/Password.
7. Click on 'Units' from the menu bar. You will be able to view your installed unit in the table as shown below.
8. Check if the *Status* becomes Receiveing for the relevant Unit.

9. If the state remains Not receiveing for more than 10 minutes, click on your email ID at the top right of the screen and click on 'Event Ingestion Logs' in the dropdown.

10. Check if there is some log generated at the time of installation of the TrackSo IoT Gateway device.
    a. If **NO,** please restart the device and try the same flow again.
    b. If **YES,** email us at we@freespirits.in to consult the same.