

TRACKSO CONNECTION MANUAL FOR THEA INVERTERS

Brand: THEA

Type: Solar On Grid String Inverter

Models: SE-TH 6.0 TL3, SE-TH 10.0 TL3, SE-TH 15.0 TL3, SE-TH 20.0 TL3, SE-TH 33.0 TL3, SE, SE-TH 50.0 TL3, SE-TH 60.0 TL3

CONNECTION DIAGRAM

The communication terminals (RS485) are located at the bottom side of the inverter and there are two connection terminals on the configuration circuit board.

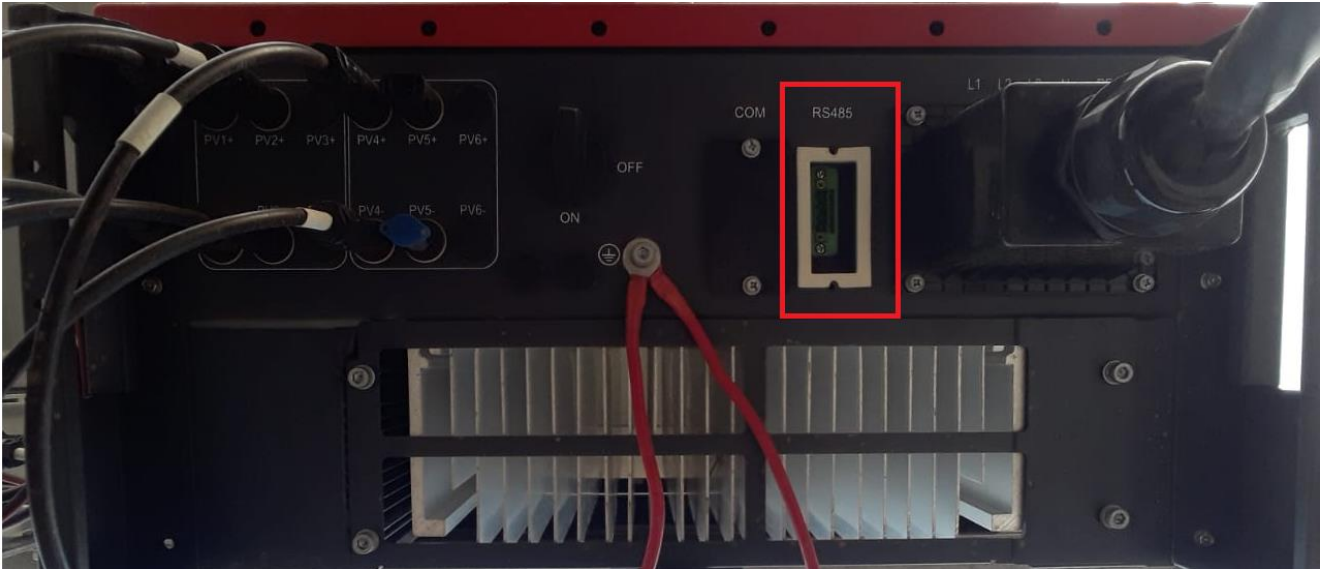


Figure T1 – Thea String Inverter Connections

Connection Steps

1. Loose the two screws on the RS485 Port.
2. The communication terminals (RS485 A/B) are located at the bottom of the section as shown in Figure T1.
3. Connect the cables to the RS485 bus terminal blocks.
4. Please make the connections from the Terminal Block chip to TrackSo IoT Gateway as mentioned in the Table – TT1

Inv Pin No. & Assignment		TrackSo Pin No. & Assignment	
1	A	3	D+
2	B	4	D-
3	A	Used for Daisy Chain	
4	B		

Table-TT1

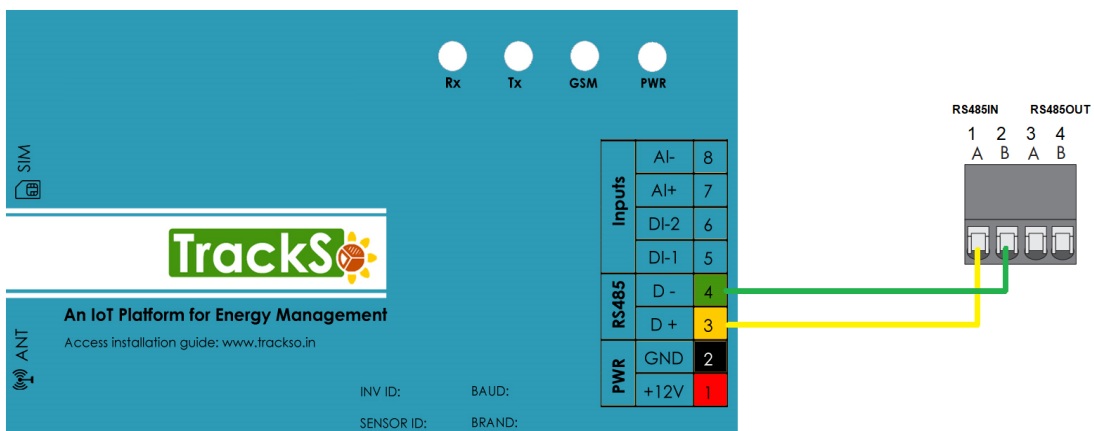


Figure T2 – THEA RS485 chip connections with TrackSo IoT Gateway

DEFAULT CONFIGURATION IN TRACKSO IOT GATEWAY

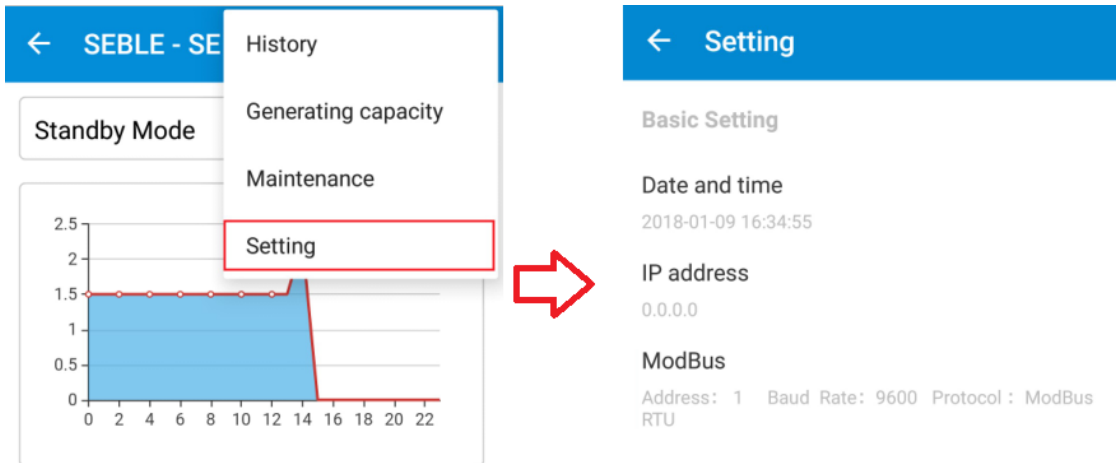
Inverter ID: **1, 2, 3, 4** Continuous numbering starting with 1, (**Range:** 1 to 247)

Baud Rate: **9600 (Default) (Values:** 9600, 19200, 38400)

Data Bits: 8 , Stop Bit: 1 , Parity: None

CONFIGURATION AT THE INVERTER END

- Install TheaTouch application in your Android/IOS Phone.
- During the use of TheaTouch App ,Make sure your phone is within 5m from the inverter.
- Login TheaTouch and register an account for your inverter.
- Connect to inverter via Bluetooth using following details.

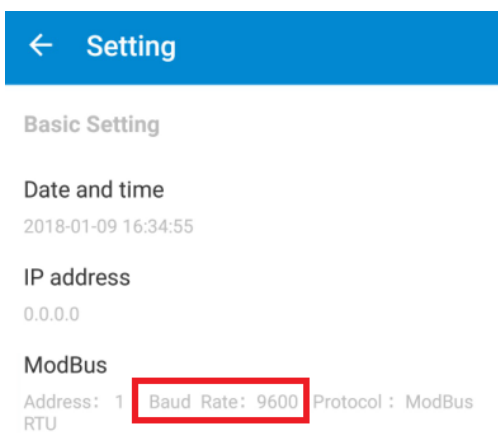


APP homepage setting

SETTING THE BAUD RATE

If you connect multiple inverters via RS485, set the same baud rate on each inverter.

Select Baud Rate-9600

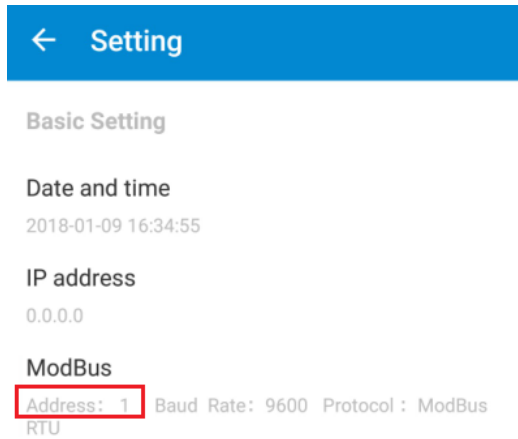


← Set the Inverter baud rate to 9600

SETTING THE INVERTER ID

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

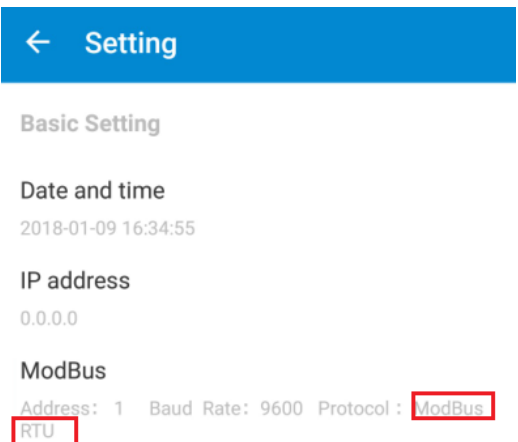
- Set a different inverter ID for each inverter in the PV plant. Otherwise, the inverters cannot be correctly identified.



← Set correct Inverter Ids

SETTING THE PROTOCOL

Set the Protocol to Modbus RTU

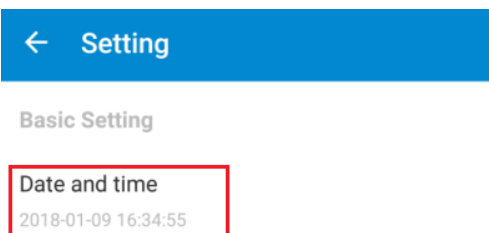


← Set correct Modbus Protocol

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.

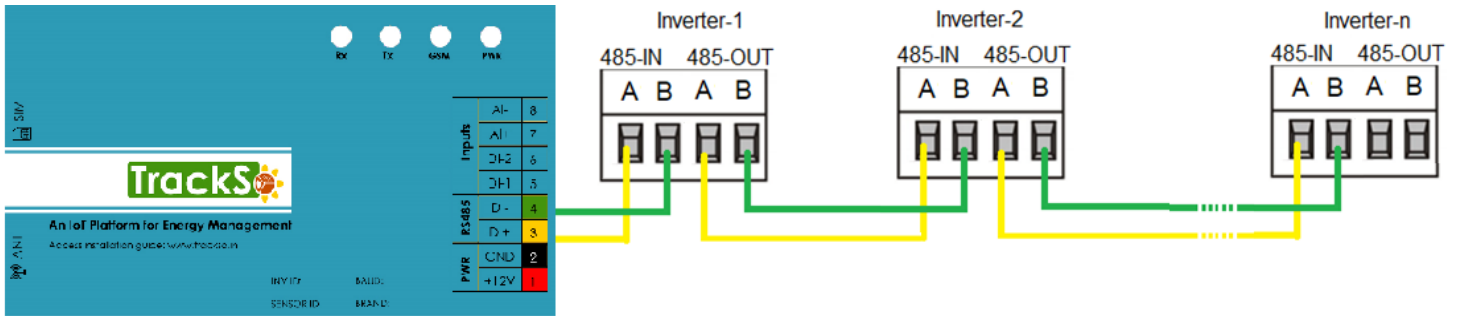
← Set the Correct Date & Time



NOTE: The above details are mentioned in the **Installation & Operation Manual** for Thea Inverte

Multiple Inverters

If multiple Inverters are to be connected then connect all Inv in daisy chain mode over the RS485 communication cable. Set different Modbus address (1~256) for each inverter in LCD display.



Note: Ensure to use a 120ohm Modbus Terminator at the end of the network, for proper communication