## TRACKSO CONNECTION MANUAL FOR POLYCAB INVERTERS

Brand: Polycab

Type: Solar On Grid String Inverter

Models: PSIS-1K, PSIS-1.5K, PSIS-2K, PSIS-3K, PSIS-4K, PSIS-5K, PSIT-6K, PSIT-10K, PSIT-15K, PSIT-20K, PSIT-25K, PSIT-36K, PSIT-40K

### CONNECTION DIAGRAM

The below diagram shows communication interface which is located at the bottom of the inverter.

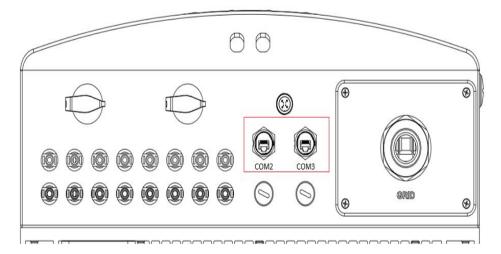


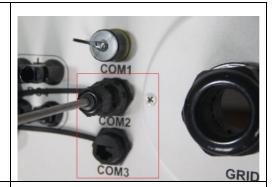


Figure P1 –Sample Photo of Bottom of the Polycab Inverter for Connections

### **Connection Procedure**

- 1. Please unscrew the RS485 terminal (communication port ) as shown in Figure P1.
- 2. Please make the connections from the Inverter RS485 port to TrackSo IoT Gateway as per Method-1 or Method-2 mentioned (Pictures available on next page)
  - a. **Method-1** -Applicable for all Polycab Inverters having RS485 communication output on LAN type RJ45 port

Insert one side of a LAN wire in RJ45 port of Inverter, on other side Short 1<sup>st</sup> and 4<sup>th</sup> wire and connect to Data+ pin on TrackSo and short 2<sup>nd</sup> and 5<sup>th</sup> Wire and connect to Data- pin on TrackSo



b. **Method-2**- Applicable for 5G series Polycab Inverters having RS485 communication output on 2pin type connector.

Connect Pin A of Inverter to Data+ on TrackSo and connect Pin B of inverter to Data-on TrackSo

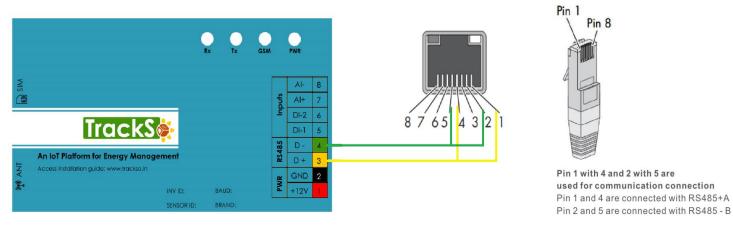


# **Method-1** -Applicable for all Polycab Inverters having RS485 communication output on LAN type / RJ45 port

- Insert one side of a LAN wire in RJ45 port of Inverter, on other side Short 1<sup>st</sup> and 4<sup>th</sup> wire and connect to Data+ pin on TrackSo and short 2<sup>nd</sup> and 5<sup>th</sup> Wire and connect to Data- pin on TrackSo

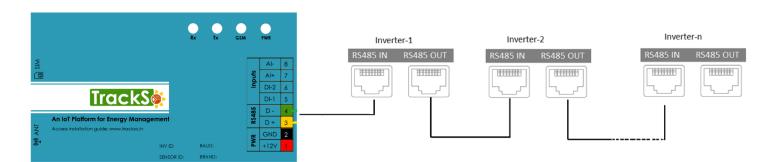
Polycab RJ45 Connector	Polycab Pin No. & Assignment		TrackSo Pin No. & Assignment	
COM2	1 & 4	RS485A	3	D+
	2 & 5	RS485B	4	D-
сомз	1 & 4	RS485A	Used for Daisy Chain Connections	
	2 & 5	RS485B		

Table PT1 -Polycab RJ45 type port connections with TrackSo IoT Gateway



# **Multiple Inverter Connections**

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.



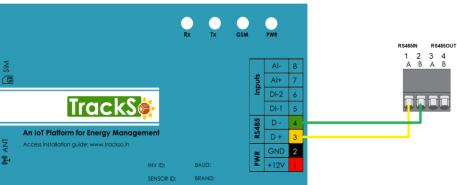
Note: Ensure to use a 120ohm Modbus Terminator at the end of the network, for proper communication

**Method-2** - Applicable for 5G series Polycab Inverters having RS485 communication output on 2pin type connector.

- Connect Pin A of Inverter to Data+ on TrackSo and connect Pin B of inverter to Data- on TrackSo

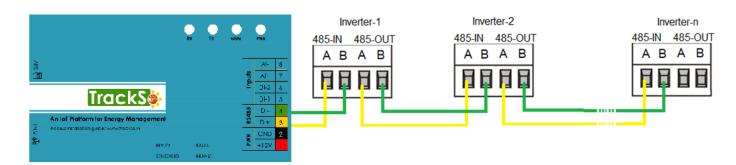
Polyca	TrackSo Pin No. & Assignment			
RS485 IN	A/1	RS485A	3	D+
	B / 2	RS485B	4	D-
RS485 Out	A/3	RS485A	Used for Daisy Chain Connections	
	B / 4	RS485B		

<u>Table PT2 –Polycab Inverter connections with TrackSo IoT Gateway</u>



## **Multiple Inverter Connections**

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 1the network, for proper communication

### 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)

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

#### CONFIGURATION AT THE INVERTER END

Information

Settings

Advanced Info.

Advanced Settings

## SETTING THE INVERTER ID







Main Menu

Setting

Address setting

### SETTING THE BAUD RATE

Default baud rate of Inv: 9600bps

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

Kindly note Polycab Inverters are by default available at 9600bps and does not provide any option to change baud rate.

#### SET DATE & TIME OF INVERTER

#### ← Set the Correct Date & Time

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



