

# TRACKSO INSTALLATION GUIDE FOR KSOLARE INVERTERS

**Brand:** KSOLARE  
**Type:** Solar On-Grid String Inverter  
**Models:** 1KW-3.2KW, KSY 4.2KW-6.2KW, KSY 5KW-12KW with RS232 Type Output

## CONNECTION DIAGRAM

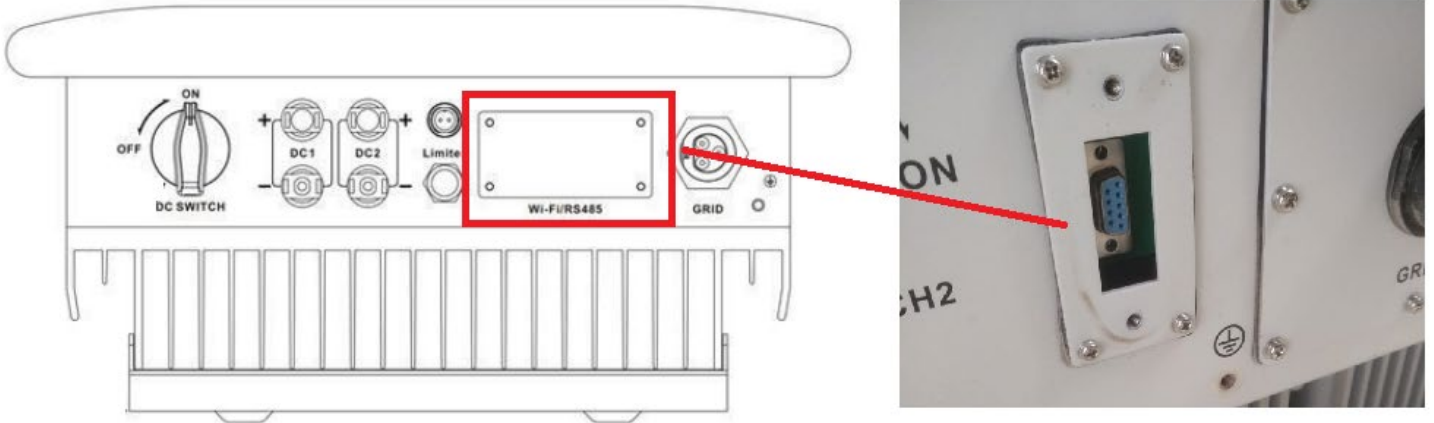


Figure K1 – KSolare Communication Board

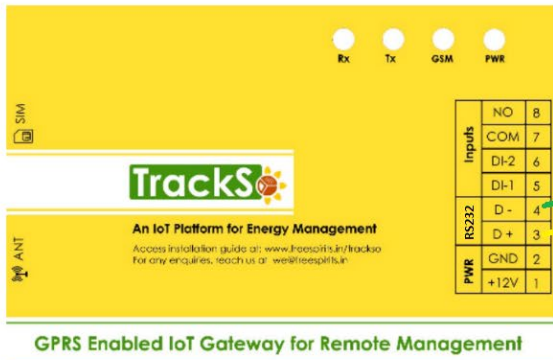
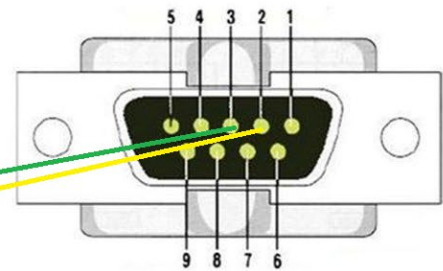
### Connection Steps:

1. This type of inverter requires a DB9 Male connector. [Link](#)  
(To be purchased separately)
2. Plug in DB9 male connector in the Inverter
3. Please make the connections from the connector RS232 of Ksolare Inv to TrackSo IoT Gateway as mentioned in the Table – T1.
4. Please provide 12V external supply to TrackSo IoT Gateway via 12V, 2A DC adaptor provided in the package.

Ksolare DB9 Pin No. & Assignment		TrackSo Pin No. & Assignment	
2	RX	3	RS485+
3	TX	4	RS485-

Table K2 – KSolare RS232 chip connections with TrackSo IoT Gateway

### DB9 Serial port interface define



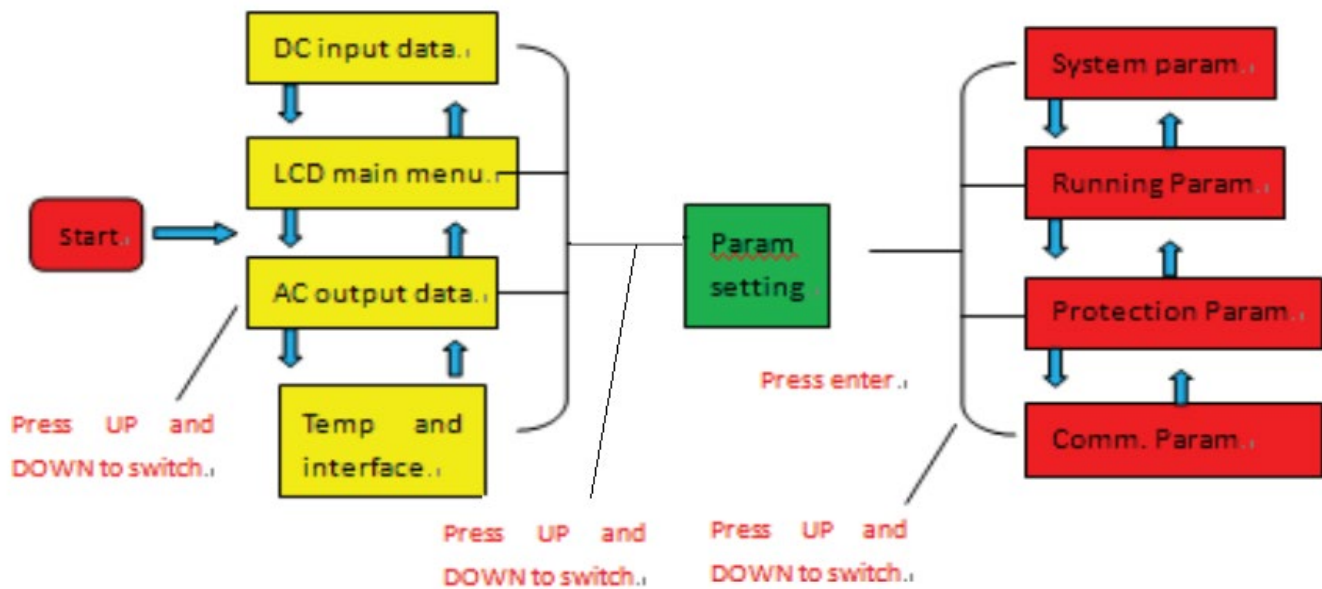
GPRS Enabled IoT Gateway for Remote Management

## 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

Following is the Inverter interface which we will be accessing to completed inverter settings



## SETTING THE BAUD RATE

The communication baud rate is to be set at 9600 bit/s

Menu >> Setup >> Comm Param > BaudRate



## SETTING THE INVERTER ID

The inverter ID is used to identify the inverter in a RS232/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.

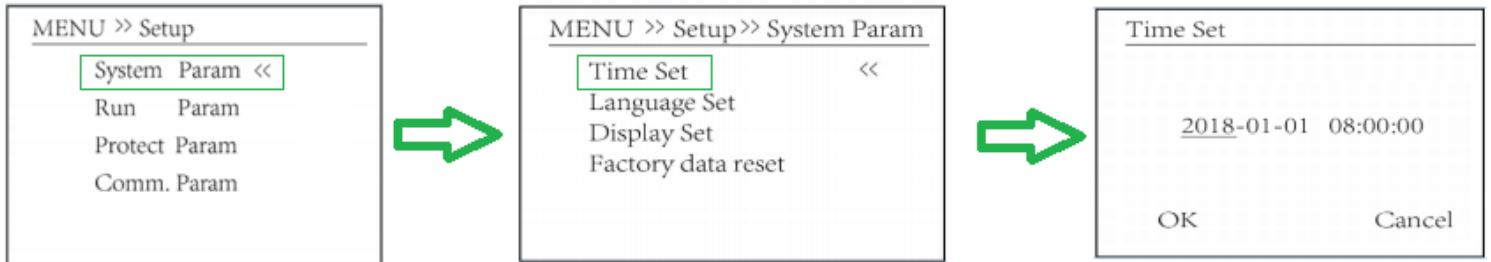
Menu >> Setup >> Comm Param > Address

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## SETTING THE 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.

Menu >> Setup >> System Param >Time Set



The above details are mentioned in the Installation & Operation Manual for [Ksolare Inverters](#)

## TRACKSO WORKING

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

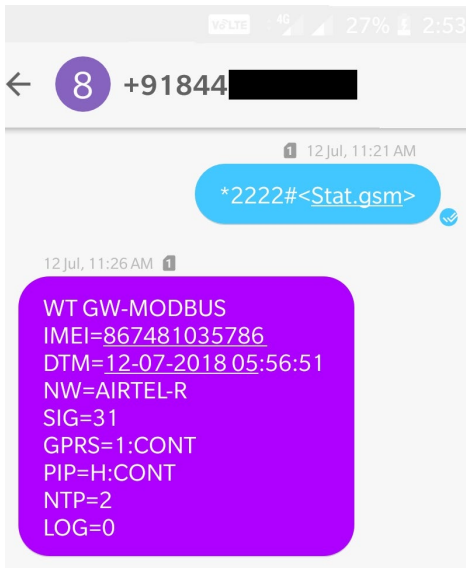


3. Switch on the power to the TrackSo device. (Minimum 12V/1A input is required)
4. Power LED (Red) of TrackSo IoT gateway glows and stays ON.

**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	<table border="1"> <thead> <tr> <th>LED Status</th> <th>Connection State</th> </tr> </thead> <tbody> <tr> <td>Flashing (ON for 100ms and OFF for 100ms)</td> <td>SIM Card not found</td> </tr> <tr> <td>Flashing (ON for 500ms and OFF for 500ms)</td> <td>Searching for GSM Network</td> </tr> <tr> <td>Flashing (ON for 0.1s and OFF for 2.9s) Once at every 3sec</td> <td>GSM Network Registered</td> </tr> <tr> <td>Flashing twice at every 3sec</td> <td>GPRS IP Connected</td> </tr> <tr> <td>Flashing 5times</td> <td>GPRS IP Sending data</td> </tr> <tr> <td>LED OFF</td> <td>GSM Fault</td> </tr> </tbody> </table>	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
		LED Status	Connection State													
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		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 internet

- If the GSM light starts flashing 5 times then Login to [www.trackso.in](http://www.trackso.in) with your Username/Password.
- Click on 'Units' from the menu bar. You will be able to view your installed unit in the table as shown below.
- Check if the **Status** becomes **Receiving** for the relevant Unit.

Mashups
Sites
Units
Rules
Notifications

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Home / Units
Add Unit

Show 10 ▾
Search for...

Unit Name	Site	Unit Key	Category	Data Status	Last Event Timestamp	Device Key	Device Phone	Actions
1-Schnieder		[redacted]cc	Inverter	Receiving	2018-07-16 02:24:04	[redacted]31034235444/1	[redacted]9	View Data
2-Schnieder		[redacted]7799	Inverter	Receiving	2018-07-16 02:24:05	[redacted]034235444/2	[redacted]9	View Data
[redacted]	School	[redacted]5	Inverter	Not Receiving			[redacted]8	View Data
[redacted]	chool	[redacted]5	Inverter	Not Receiving				View Data

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.

TrackSo Mashups Sites Units Rules Notifications

Home / Event Ingestion Logs

Event Ingestion Logs

Show 10

Timestamp	Message	code
2018-07-16 02:42:16	Invalid request. Event should contain data. { "events": [{ "timestamp": 1531689133, "unit_key": "84f8b2c", "data": { } } ] }	not_acceptable
2018-07-16 02:41:13	Invalid request. Event should contain data. { "events": [{ "timestamp": 1531689070, "unit_key": "84f8b2c", "data": { } } ] }	not_acceptable
2018-07-16 02:40:10	Invalid request. Event should contain data. { "events": [{ "timestamp": 1531689007, "unit_key": "84f8b2c", "data": { } } ] }	not_acceptable

10. Check if there is some log generated at the time of installation of the TrackSo IoT Gateway device.
- If **NO**, please restart the device and try the same flow again.
  - If **YES**, email us at [support@trackso.in](mailto:support@trackso.in) to consult the same.