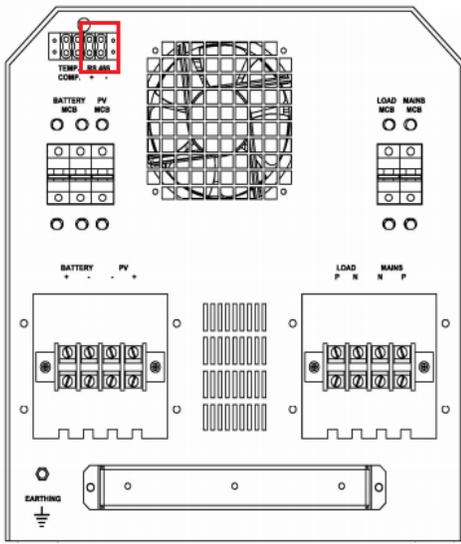


TRACKSO INSTALLATION GUIDE FOR GROWATT INVERTERS

Brand: Statcon Energiaa
Type: Off-Grid Inverter

CONNECTION DIAGRAM

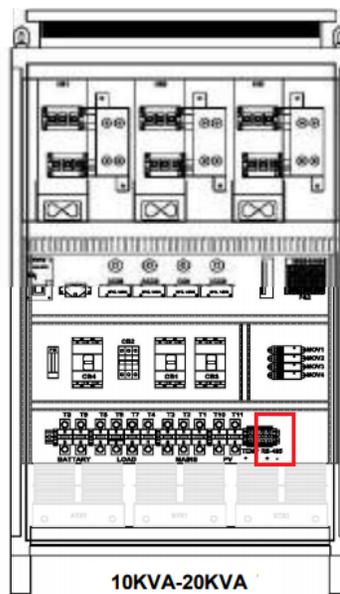
The communication terminals (RS485) are located at the back of the inverter. And there are two connection terminals on the configuration circuit board: RS485 A/B terminal blocks.



**1KVA-4KVA
REAR VIEW**

T11-T12

RS-485 terminals.



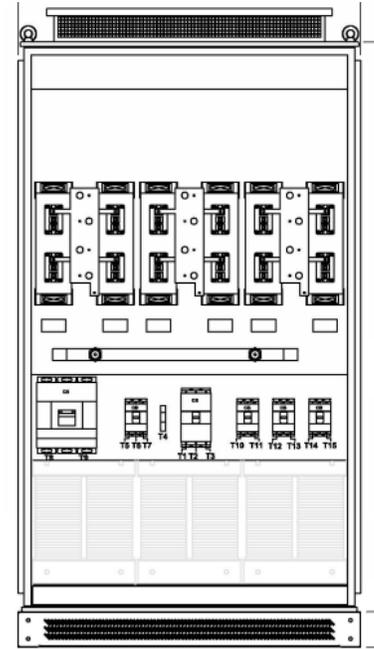
**10KVA-20KVA
25KVA-40KVA
OPEN DOOR VIEW**

T17-T18

RS-485 terminals.

T18-T19

RS-485 terminals.



**50KVA-75KVA
OPEN DOOR VIEW**

with Single Channel MPPT Charger

Three MPPT Charge controller

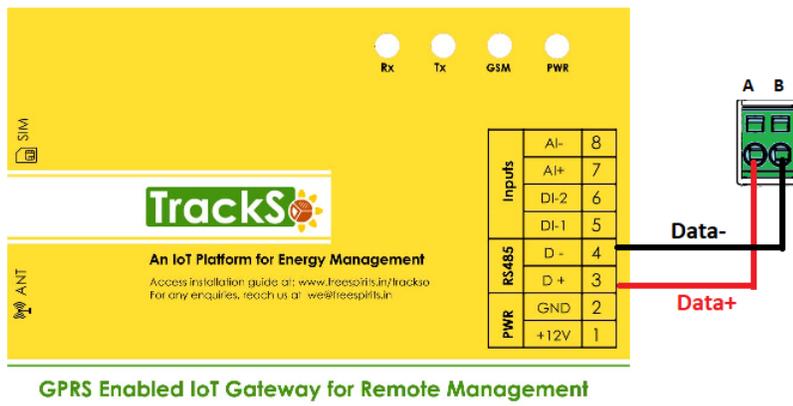
Figure S1 – Statcon Energiaa Communication Port locations

Connection Steps

1. Please unscrew the RS485 terminal as shown in A part of Figure S1.
2. Connect the cables to the RS485 bus terminal blocks.
3. Please make the connections from the Terminal Block chip to TrackSo IoT Gateway as mentioned in the Table – ST1.

Statcon Energiaa Pin No. & Assignment			TrackSo Pin No. & Assignment	
T11	T17	485A	3	D+
T12	T18	485B	4	D-

Table ST1 Statcon Energiaa RS485 chip connections with TrackSo IoT Gateway



GPRS Enabled IoT Gateway for Remote Management

DEFAULT CONFIGURATION IN TRACKSO IOT GATEWAY

Inverter ID: 1

Baud Rate: 9600

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

CONFIGURATION AT THE INVERTER END

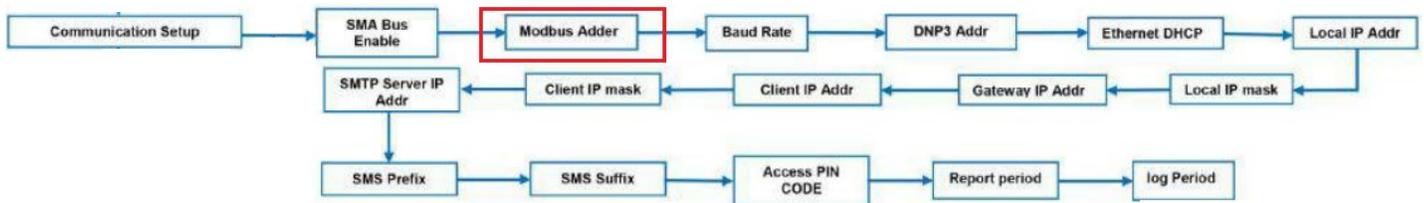
NOTE: The below details are mentioned in the [Installation & Operation Manual](#) for Statcon Energiaa Inverter

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

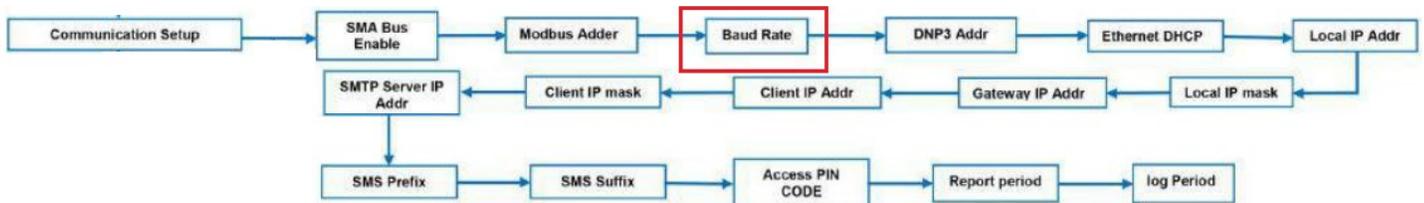
← Set the Correct Date & Time

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

SET BAUD RATE

← Set baud rate 9600

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



TRACKSO WORKING

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



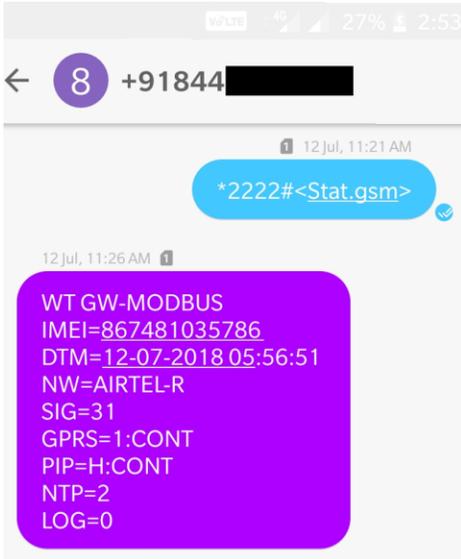
Place the SIM Tray in SLOT and Push the Tray

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	<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													
		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 internet

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 **Receiving** for the relevant Unit.



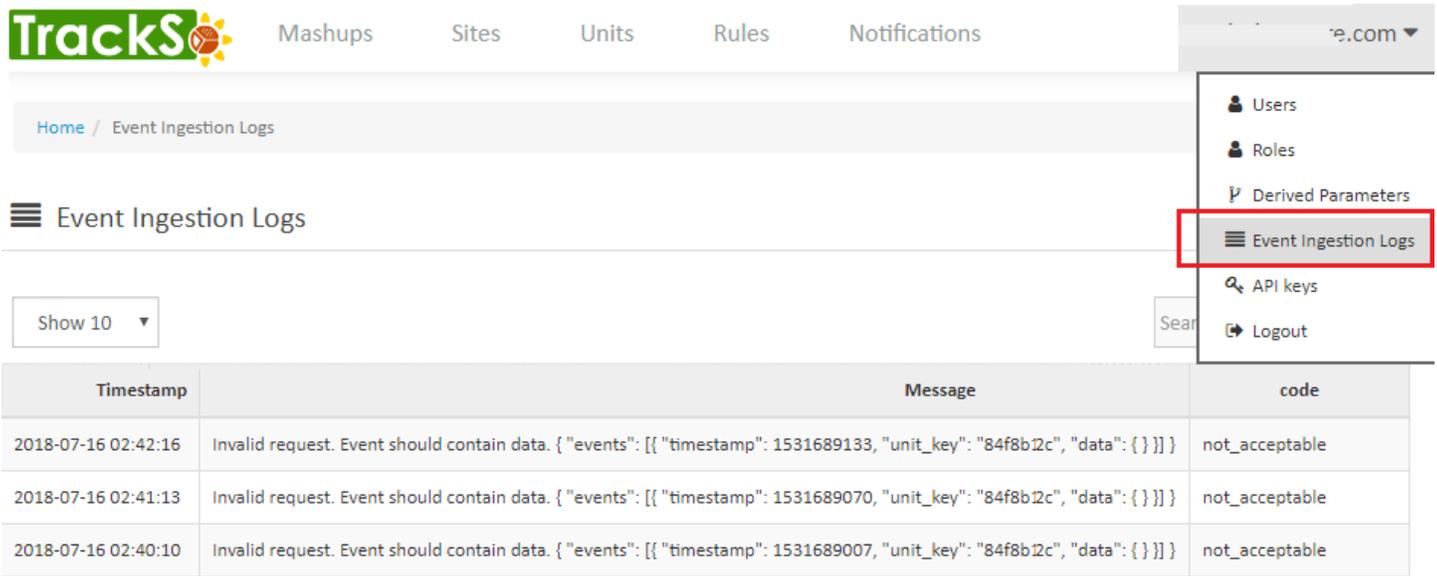
Mashups
Sites
Units
Rules
Notifications

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		cc	Inverter	Receiving	2018-07-16 02:24:04	31034235444/1	9	View Data
2-Schneider		7799	Inverter	Receiving	2018-07-16 02:24:05	034235444/2		View Data
	School	5	Inverter	Not Receiving			3	View Data
	chool	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.



The screenshot shows the TrackSo dashboard with the following elements:

- Header: TrackSo logo, Mashups, Sites, Units, Rules, Notifications, and a user profile dropdown menu.
- Breadcrumbs: Home / Event Ingestion Logs
- Section Header: Event Ingestion Logs
- Filter: Show 10 (dropdown)
- Search: Search (input field)
- Table: Event Ingestion Logs table with columns: Timestamp, Message, and code.
- User Dropdown Menu: Users, Roles, Derived Parameters, **Event Ingestion Logs** (highlighted), API keys, Logout.

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 we@freespirits.in to consult the same.