Brand: ZTT
Type: Solar On Grid String Inverter
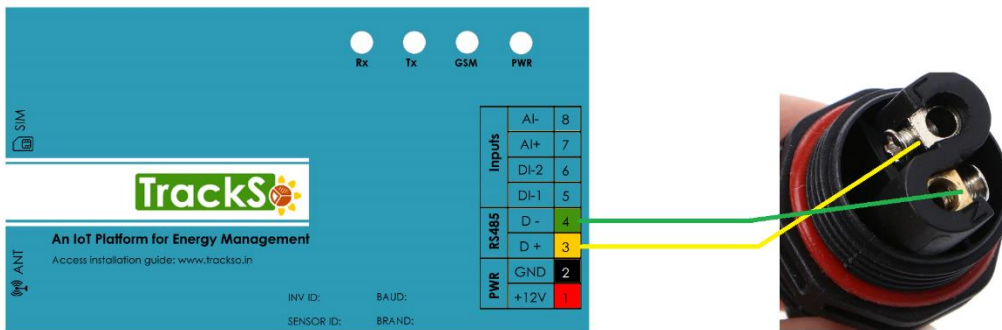**Models:** SI-10KE~SI-30KE

CONNECTION DIAGRAM

Figure Z1 –ZTT Sring Inverter Communication board

The communication terminals (RS485) are located at the bottom of the inverter.

Connection steps

1. Please unscrew the RS485 terminal.
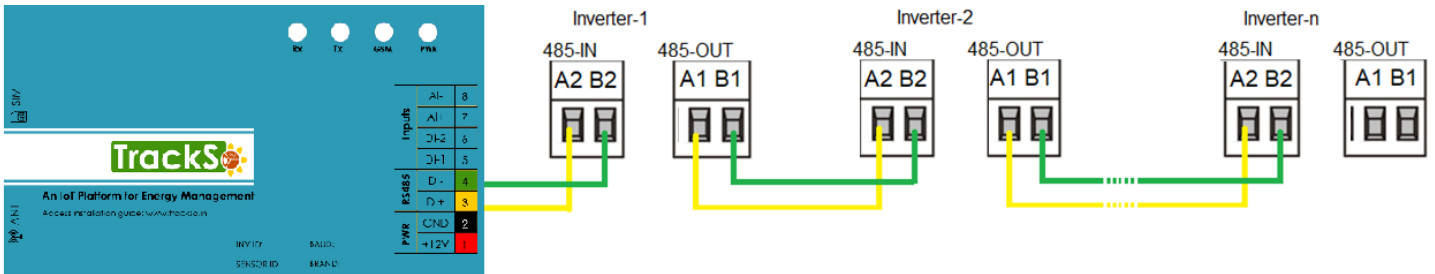2. Please make the connections from the Terminal Block to TrackSo IoT Gateway.

ZTT Pin No. & Assignment		TrackSo Pin No. & Assignment	
+	RS485+	3	RS485+
-	RS485-	4	RS485-

Table Z1 – ZTT RS485 chip connections with TrackSo IoT Gateway

Multiple Inverter Connections

If multiple ZTT Inv are used, connect all Inv in daisy chain mode over theRS485 communication cable. Set different Modbus address (1~256) for each inverter in LCD display and set terminator resistance in inverters

DEFAULT CONFIGURATION IN TRACKSO IOT GATEWAY

Inverter ID: **1, 2 ….** 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

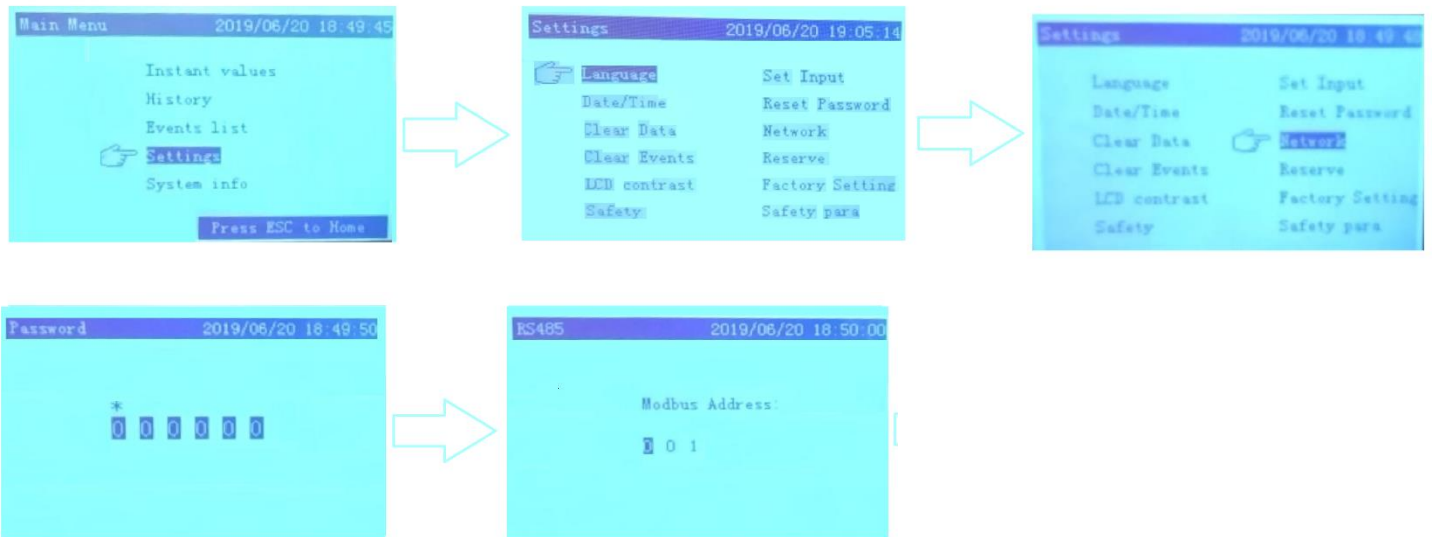## CONFIGURATION AT THE INVERTER END

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.

Steps for completing Inverter ID Settings

- Slave MODBUS address need set on LCD screen, setting as below:
- Menu→ System setting→network→RS485→ input MODBUS address (Default Inverter password- 111111)
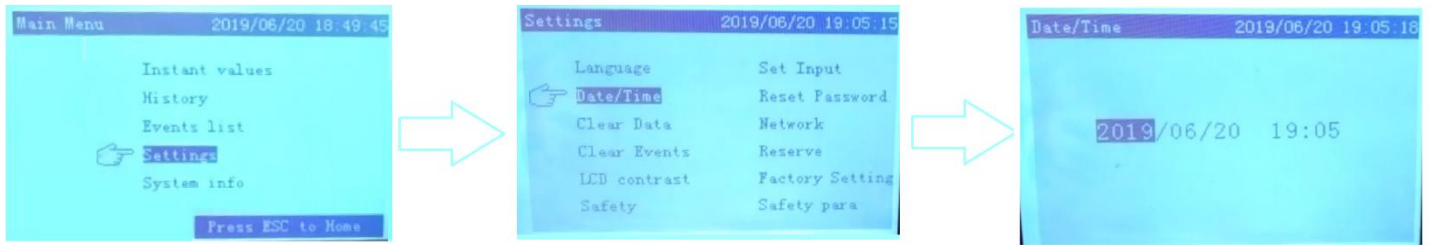
← Set correct Inverter Ids

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**

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

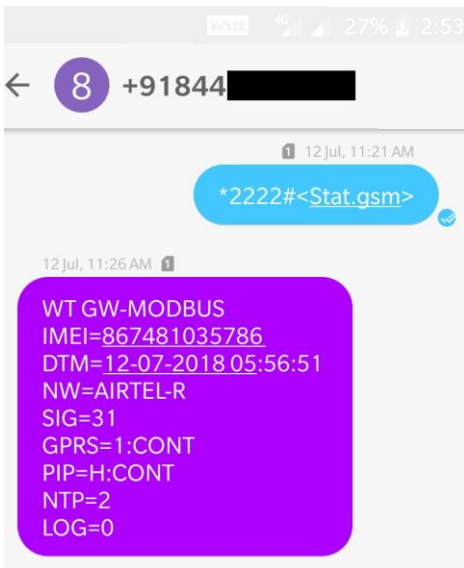Place the SIM Tray in SLOT and Push the Tray

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.

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	▮1034235444/1	▮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 <mark>Not receiveing</mark> 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 support@trackso.in to consult the same.