

TRACKSO INSTALLATION GUIDE FOR HUAWEI

Brand: Huawei
Type: Solar On Grid String Inverter
Models: SUN2000-25KTL,30KTL,33KTL, 36KTL, 40KTL,55KTL, 60KTL, 100KTL, 110KTL, 125KTL

CONNECTION DIAGRAM

Locate communication terminals (RS485) as per your Inverter Model Picture. There are two connection terminals on the configuration circuit board: RS485IN and RS485OUT (used for Daisy Chain connections)

Following Connection Diagram is valid for
HUAWEI SUN2000-33KTL, 36KTL, 40KTL,55KTL, 60KTL

Connection steps

- Please unscrew the RS485 terminal as shown in A part of *Figure H1*.
- Please make the connections from the Terminal Block to TrackSo IoT Gateway as mentioned in Table – HT1.
- Provide 12V external supply to TrackSo IoT Gateway via 12V, 2A DC adaptor provided in the package

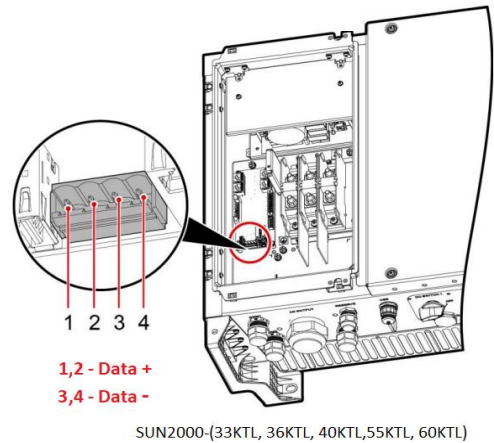
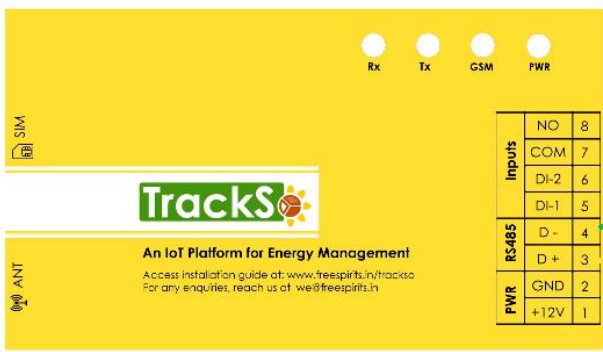


Figure H1: Huawei SUN2000-33KTL, 36KTL, 40KTL,55KTL, 60KTL String Inverter communication port

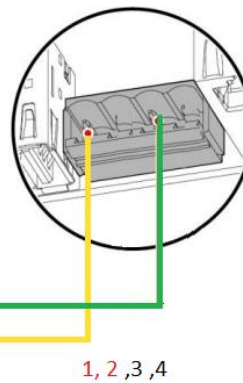
Huawei Pin no. & Assignment		TrackSo Pin No. & Assignment	
1	RS485A	3	Data+
2	RS485A		RS485 Out
3	RS485B	4	Data-
4	RS485B		RS485 Out

Table HT1 – Huawei SUN2000-33KTL, 36KTL, 40KTL,55KTL, 60KTL RS485 connections with TrackSo IoT Gateway

Note: RS485 Out- Used in case of Multiple Inverter Connection (Daisy chain).



GPRS Enabled IoT Gateway for Remote Management



SUN2000-(33KTL, 36KTL, 40KTL,55KTL, 60KTL)

Locate communication terminals (RS485) as shown in the picture below. There are two connection terminals on the configuration circuit board: RS485IN and RS485OUT (used for Daisy Chain connections)

Following Connection Diagram is valid for HUAWEI SUN2000-25KTL,30KTL

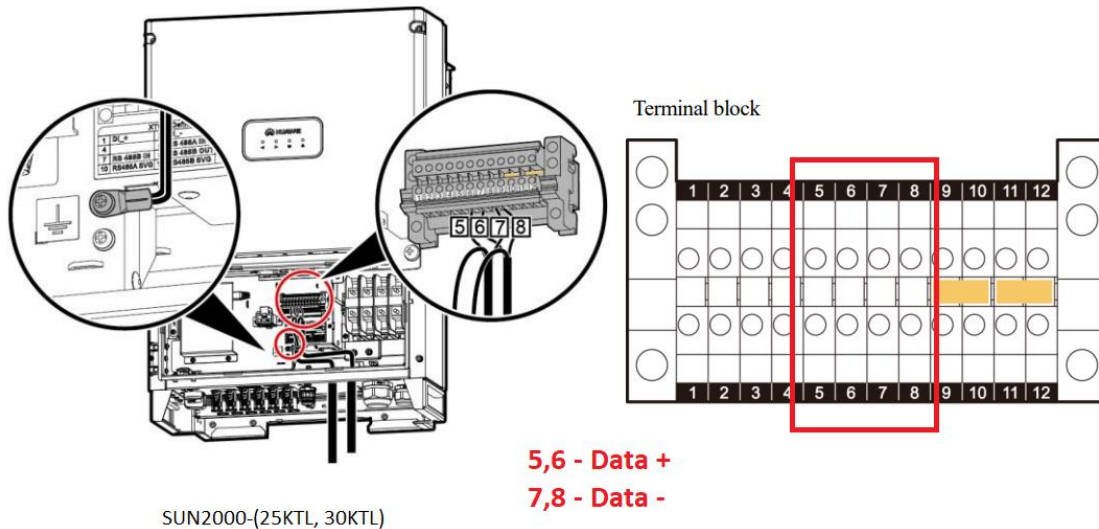


Figure H2: Huawei SUN2000-25KTL,30KTL communication port & Connections

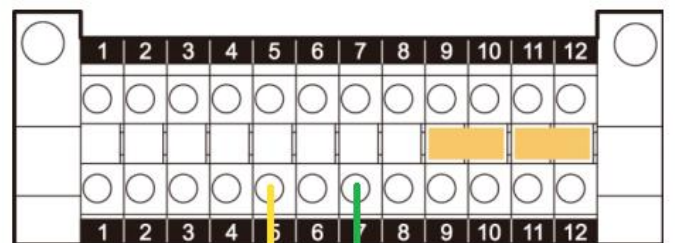
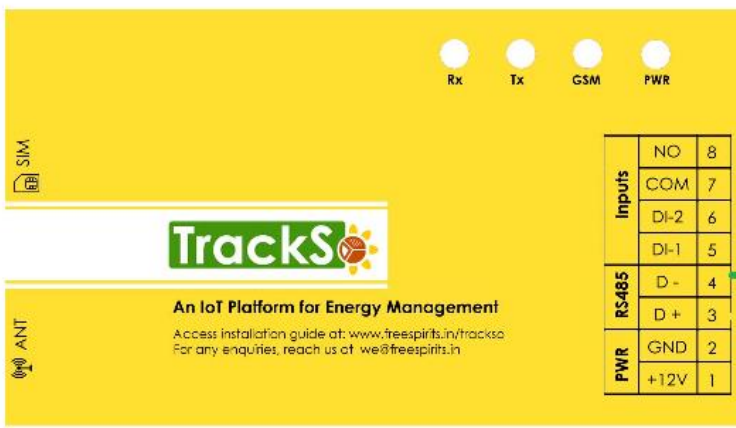
Connection steps

- Please unscrew the RS485 terminal as shown in A part of Figure H2.
- Please make the connections from the Terminal Block to TrackSo IoT Gateway as mentioned in Table – HT2.
- Provide 12V external supply to TrackSo IoT Gateway via 12V, 2A DC adaptor provided in the package.

Huawei Pin no. & Assignment		TrackSo Pin No.& Assignment	
5	RS485A	3	Data+
6	RS485A	RS485 Out	
7	RS485B	4	Data-
8	RS485B	RS485 Out	

Table HT2 – Huawei SUN2000-25KTL,30KTL RS485 connections with TrackSo IoT Gateway

Note: RS485 Out- Used in case of Multiple Inverter Connection (Daisy chain).

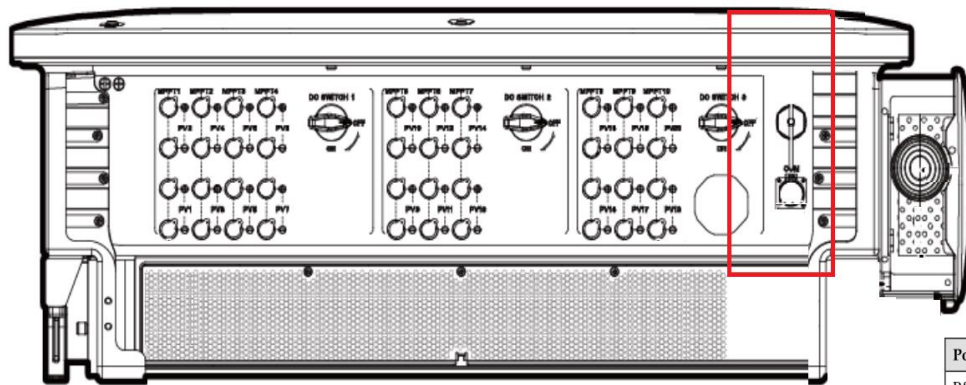


SUN2000-(25KTL, 30KTL)

GPRS Enabled IoT Gateway for Remote Management

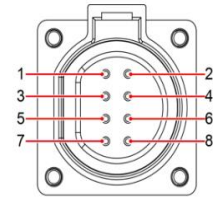
Locate communication terminals (RS485) as shown in the picture below. There are two connection terminals on the configuration circuit board: RS485IN and RS485OUT (used for Daisy Chain connections)

Following Connection Diagram is valid for HUAWEI SUN2000-100KTL, 110KTL, 125KTL



SUN2000-100KTL, 110KTL, 125KTL

Pin Definitions of the Communications Port



Port	Pin	Definition	Pin	Definition
RS485-1	1	RS485A IN, RS485 differential signal+	2	RS485A OUT, RS485 differential signal+
	3	RS485B IN, RS485 differential signal-	4	RS485B OUT, RS485 differential signal-

Figure H3: Huawei SUN2000-100KTL,110KTL,125KTL communicatio port & Connections

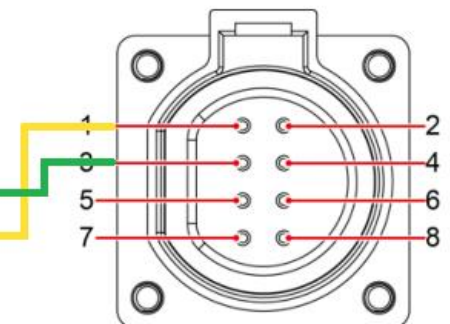
Connection steps

- Please unscrew the RS485 terminal as shown in A part of Figure H3.
- Please make the connections from the Terminal Block to TrackSo IoT Gateway as mentioned in Table – HT3.
- Provide 12V external supply to TrackSo IoT Gateway via 12V, 2A DC adaptor provided in the package.

Huawei Pin no. & Assignment		TrackSo Pin No.& Assignment	
1	RS485A	3	Data+
2	RS485A	RS485 Out	
3	RS485B	4	Data-
4	RS485B	RS485 Out	

Table HT3 – Huawei SUN2000-100KTL,110KTL, 120KTL RS485 connections with TrackSo IoT Gateway

Note: RS485 Out- Used in case of Multiple Inverter Connection (Daisy chain).



GPRS Enabled IoT Gateway for Remote Management

SUN2000-100KTL, 110KTL, 125KTL

DEFAULT CONFIGURATION IN TRACKSO IOT GATEWAY

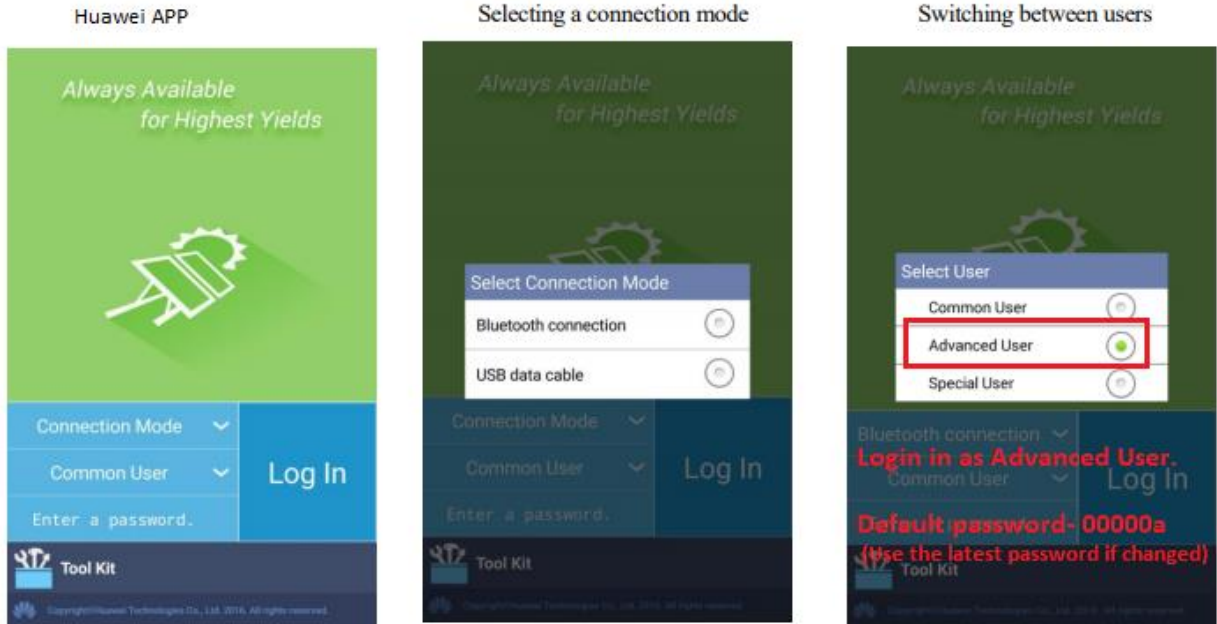
Inverter ID: **1, 2, 3, 4** Continuous numbering starting with 1, (**Range: 1 to 247**)

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

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

CONFIGURATION AT THE INVERTER END

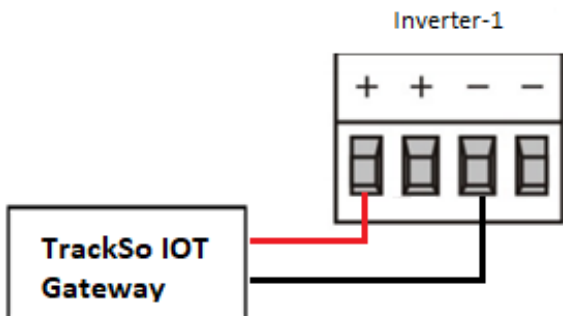
Connect the SUN2000 to the mobile phone that runs SUN2000 app through a Bluetooth module or USB data cable (same as used for commissioning of the inverter)



After the successful login, the Quick Settings screen or Function Menu screen is displayed

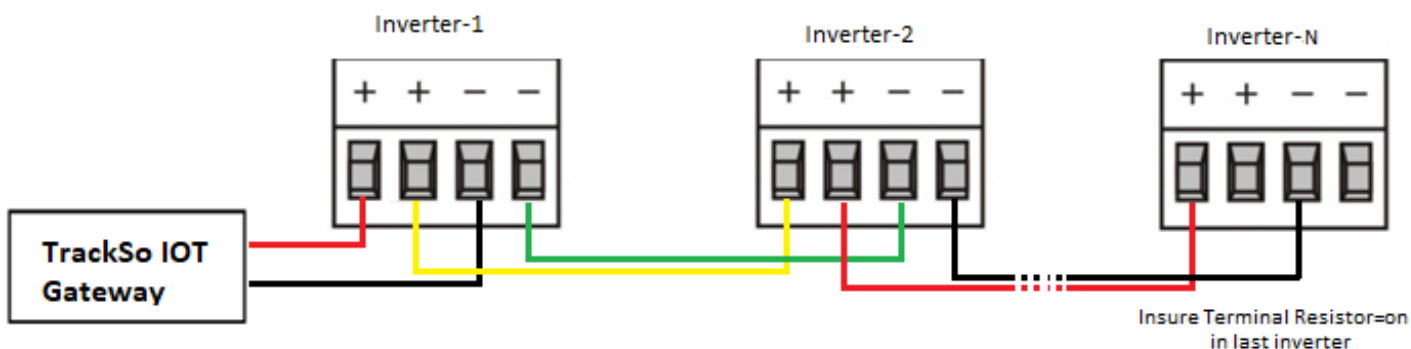
Huawei APP Screenshot	Settings
<p>Quick Settings screen (logging in as an advanced user)</p>	<p>Set Data & Time For a precise calculation of the statistics in the inverter itself and in a monitoring system, date and time have to be correct.</p> <p>Set Baud Rate Default Value for configuration TrackSo – 9600 If you connect multiple inverters via RS485, set the same baud rate on each inverter.</p> <p>Set Protocol Modbus RTU protocol is to be selected for proper communication setup between Huawei and TrackSo IoT Gateway</p> <p>Set communication Address The address/ID is used to identify the inverter in a RS485 connection</p> <ul style="list-style-type: none"> 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

Single Inverter Terminal Resistor-off



Multiple Inverters

If multiple SUN2000s are used, connect all the SUN2000s in daisy chain mode over an RS485 communications cable.



When two or more inverters are in parallel communication, the terminal resistor should be switched on or else, it may cause communication interruption.

NOTE: The above details are mentioned in the [Installation & Operation Manual](#) for SUN2000-(33KTL, 36KTL, 40KTL,55KTL, 60KTL) or [Installation & Operation Manual](#) for SUN2000-(25KTL, 30KTL) or [Installation & Operation Manual](#) for SUN2000-(100KTL, 110KTL,125KT)