

TRACKSO INSTALLATION GUIDE FOR TRINITY NF29 METER

Brand: Trinity
Type: Multi-line Digital Display Panel Meter
Models: Trinity NF29 Meters

CONNECTION DIAGRAM

On the rear panel, Trinity NF29 Meters has an RS-485 communication socket as shown in the following figure.

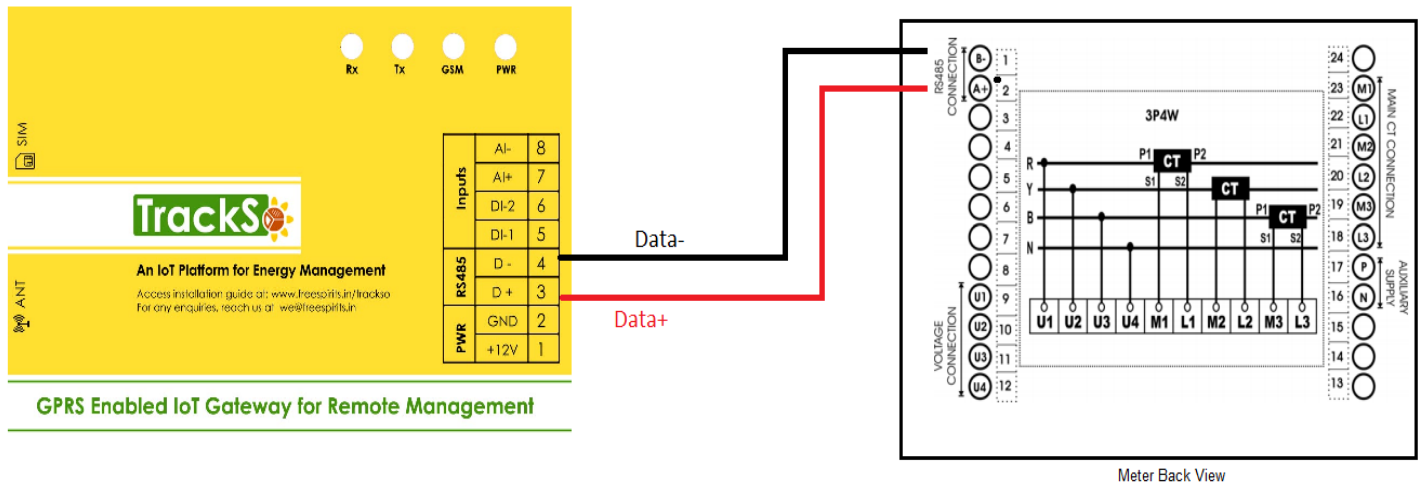


Figure T1 – Rear view of Trinity NF29 Meter

1. Please unscrew the RS485 terminal as shown in Figure T1.
2. Connect the cables to the RS485 bus terminal blocks.
3. Please make the connections from Terminal Block chip to TrackSo IoT Gateway as mentioned in the Table – TT1.

Trinity NF29 Pin No. & Assignment		TrackSo Pin No. & Assignment	
2	A	3	D+
1	B	4	D-

Table TT1 – Trinity NF29 Meter RS485 chip connections with TrackSo IoT Gateway




DEFAULT CONFIGURATION IN TRACKSO IOT GATEWAY

Inverter ID: **1 (Range: 1 to 247)**
 Baud Rate: **9600**
 Data Bits: 8
 Stop Bit: 1
 Parity: N/A (None)

CONFIGURATION AT THE METER END

Enter into programming mode to setup meter for communication


In order to operate for all the field programmable parameters, it is easy user interface by pressing the keys such as

,  and  keys. Once the unit displays CT PRIMARY, press key to move into the next programmable parameter, UNIT ADDRESS for RS485 communication.

SETTING DEVICE ID





The unit has the provision to specify a meter address at site for RS485 port. This address can be set starting from 1 to 255 with a fixed baud rate of 9600

To set the Device ID, proceed the following instruction:

- 1) Press  key for about 4 to 5 seconds on Run Mode display.
- 2) The unit will enter into Programming Mode display with the settable parameter, unit ADDRESS such as shown below

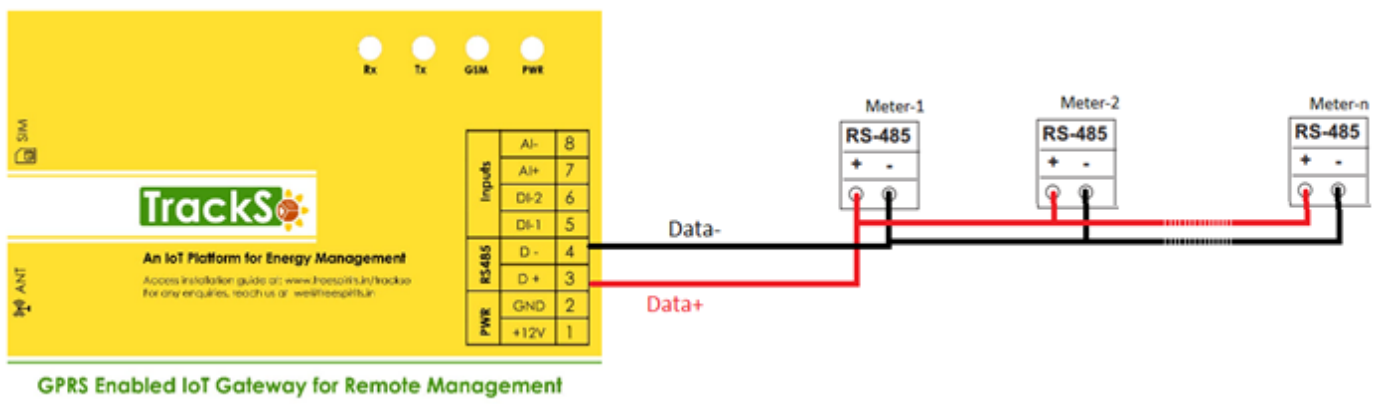


Set Unit Id (Modbus Address) as mentioned on the TrackSo Device

- 3) Press  key. Immediately, P starts blinking with an interval of one second which shows that the parameter is now settable. Set the ADDRESS by using  and  keys until the desired value is received and then, press  key to confirm the set value.
- 4) Now, the unit will reset and return into Run Mode.

NOTE: The above details are mentioned in the [Installation & Operation Manual](#) for Trinity NF29 Meter.

CONNECTING MULTIPLE METER



TRACKSO WORKING

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

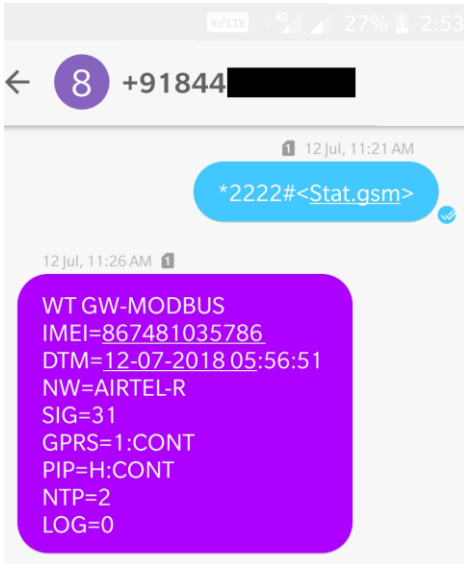


3. Switch on the power to the TrackSo device. (Minimum 12V/1A input is required)
4. Power LED (Red) of TrackSo IoT gateway glows and stays ON.

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
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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



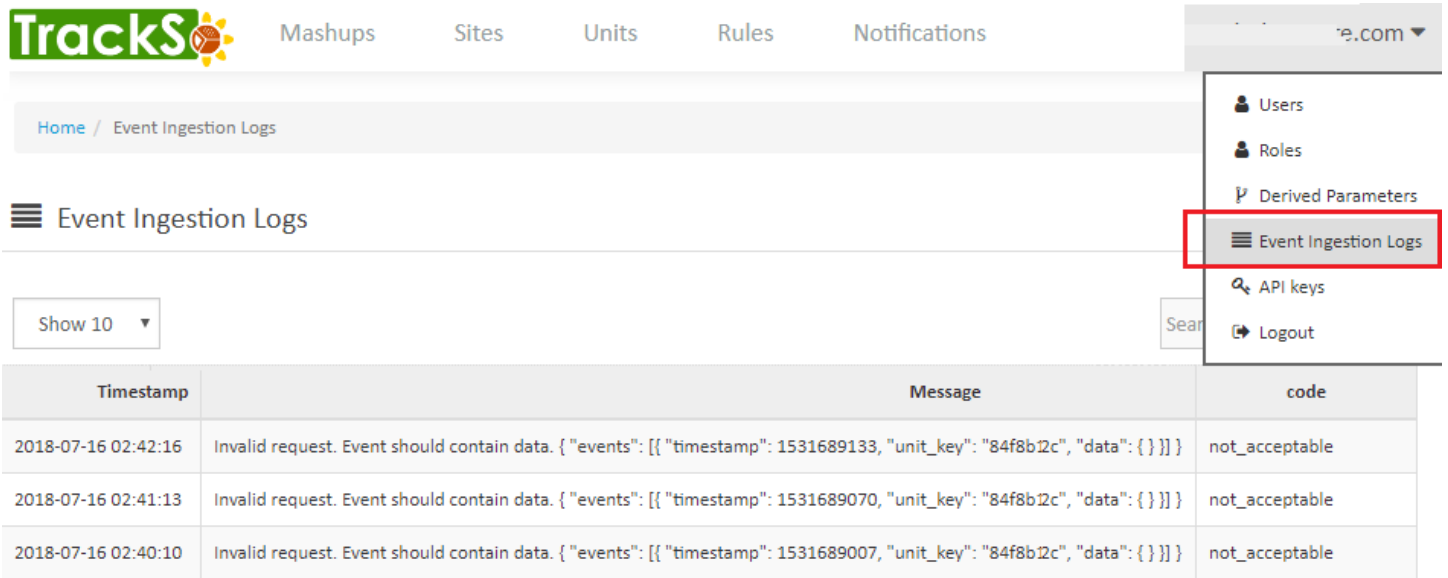
SMS Command= *2222#<Stat.gsm>	
IMEI	IMEI No. of the data logger (Device Key)
NW	Network
SIGN	Signal Strength out of 31
GPRS	CONT- connected , NC- not connected
PIP	Connected to TrackSo Server or not CONT- connected, NC- not connected
LOG	no. of data points stored in devices incase of no interet

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 **Receiving** for the relevant Unit.

The screenshot shows the TrackSo web application interface. The navigation bar includes 'Mashups', 'Sites', 'Units', 'Rules', and 'Notifications'. The 'Units' page is active, displaying a table of installed units. The table has columns for Unit Name, Site, Unit Key, Category, Data Status, Last Event Timestamp, Device Key, Device Phone, and Actions. The 'Data Status' column shows 'Receiving' for units 1-Schneider and 2-Schneider, and 'Not Receiving' for units at School sites.

Unit Name	Site	Unit Key	Category	Data Status	Last Event Timestamp	Device Key	Device Phone	Actions
1-Schneider		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			8	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 web application interface. At the top, there is a navigation bar with the TrackSo logo and menu items: Mashups, Sites, Units, Rules, and Notifications. On the right, there is a user profile dropdown menu with the following options: Users, Roles, Derived Parameters, **Event Ingestion Logs** (highlighted with a red box), API keys, and Logout. Below the navigation bar, the breadcrumb path is 'Home / Event Ingestion Logs'. The main heading is 'Event Ingestion Logs'. There is a 'Show 10' dropdown menu and a search box. Below these is a table with three columns: Timestamp, Message, and code. The table contains three rows of log entries, all with a 'not_acceptable' code.

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 to consult the same.