



Solar PV Monitoring & Analytics

DATASHEET & MANUAL

TRACKSO TCP ↔ RTU Converter WE-62C



A product of Free Spirits **Green** Labs
A RENEWABLE ENERGY COMPANY
www.trackso.in



Specifications

Category	Component	Details
System	CPU	ARM Cortex
	SRAM	32 Kbytes
	Flash Memory	256 Kbytes
	WDT (watchdog)	Yes
Modem	Interface	RJ45 Ethernet 10BASE-T or 100BASE-TX (Auto)
	Speed	10/100 Ethernet Half/ Full Duplex (Auto negotiating)
Serial ports	RS232 Utility port (for Converter Configuration)	RS-232: TxD, RxD, GND used for device configuration and debug
	RS485	1 x RS-485 used for communication with modbus slaves or master
	Baud Rate	Supports: 2400, 4800, 9600, 19200, 38400, 57600, 115200
Power	Operating Voltage	12 V DC to 24 V DC
Mechanical	Casing	Plastic Casing
	Degree of Protection	IP 20 (Indoor)
	Dimensions (W x L x H)	90 mm x 100mm x 25 mm
	Installation	Wall Mounting
Environmental	Operating Temperature	-25 °C to +55 °C
	Ambient Relative Humidity	5 ~ 95% RH, non-condensing

✓ Modbus RTU to Modbus TCP

✓ Modbus TCP to Modbus RTU



Pin Diagram

RS485	D -	4
	D +	3
PWR	GND	2
	+12V	1

Pin	Name	Description
4	D-	Input RS485 - / Data-
3	D+	Input RS485+ / Data+
2	GND	Ground Pin
1	+12V	DC IN - Input voltage: 12V~24V/1A.
Left Side	Ethernet	Modbus TCP Input/Output

LED Patterns

LED	NAME	DESCRIPTION
GREEN	POWER	Light when device is powered ON
RED	LAN	LED Status
		Connection State
		Flashing (ON for 100ms and OFF for 100ms) LAN Network Not Connected
		Flashing (ON for 500ms and OFF for 500ms) LAN Connected to Device
		Flashing twice at every 3sec IP is Connected to Server/Client
		LED OFF LAN Fault
GREEN	COM TX	Blink on data transmission in RS485 port
YELLOW	COM RX	Blink on data reception in RS485 port

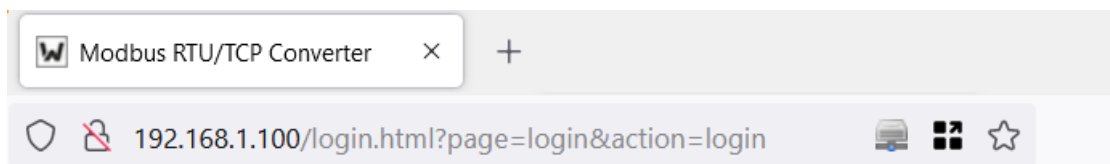
Installation

To be installed indoors or in an IP65 Enclosure for Outdoor Installation

- Power up the device by using +12V supply.
- Insert the Ethernet cable to the Ethernet jack of the device.
- Set IP in same range of Device default IP in Laptop / Desktop to Access Device Configuration
- Factory Settings of converter are: Default IP: 192.168.1.100, Subnet mask: 255.255.255.0, Gateway: 192.168.1.1
- Open your browser and type in Default IP: 192.168.1.100 and press enter.
- You should see the WebUI Login Page. Login using default details
 - user: admin
 - password: admin

WebUI

Login



USER LOGIN

Username	admin
Password	*****
	Log In

Info

TrackSo	Modbus RTU / TCP Converter		WE-62C
			Firmware Ver : 1.1.4 
Info	<u>Network</u>	<u>System</u>	
Device	IP Address: 192.168.1.100	System UP Time: 0 0:3:59	
Network	Subnet Mask: 255.255.255.0	IP Status: Cont. Fail	
Com Port	Gateway: 192.168.1.1	IP Tx/Rx Packet Cnt: 10 / 11	
Modbus TCP	MAC Address: 5410EC3061F5	Serial Tx/Rx Packet Cnt: 11 / 9	
Config.File	<u>Device</u>		
Status	Name: MODBUS-TCP CONV		
Console	Model: WE-62C		
	Serial No: 0		
	Firmware Ver: 1.1.4		
	Hardware Ver: 1.1		
	Build Date: Jun 11 2021 22:33:29		

Device

TrackSo		Modbus RTU / TCP Converter		WE-62C	
				Firmware Ver : 1.1.4 	
Info					
Device					
Network					
Com Port					
Modbus TCP					
Config.File					
Status					
Console					

Device Settings

ID:

— Set Device ID for Identification

Name:

— Set Device Name for Identification

User:

— Set Login USER name

Password:

— Set Login PASSWORD

Discover Port:

— Default 4023 for WimNet Device Scanner Port Number

Update Settings

Network

TrackSo		Modbus RTU / TCP Converter		WE-62C	
			Firmware Ver : 1.1.4		
Info	Network Configuration				
Device	Type:	☒ Static IP ☐ DHCP	— Enable DHCP to Auto Assign IP Address, Static IP - Default		
Network	IP Address:	192.168.1.100	— Set Static Device IP Address		
Com Port	Gateway:	192.168.1.1	— Set Static Network Gateway		
Modbus TCP	Subnet Mask:	255.255.255.0	— Set Static Network Subnet Mask		
Config.File	DNS:	0.0.0.0	— DNS IP Default 0.0.0.0 (*Option for Internet Access)		
Status	Update Settings				
Console					

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Com Port

TrackSo		Modbus RTU / TCP Converter		WE-62C	
				Firmware Ver : 1.1.4	
Info	Serial Port				
Device	Baud Rate:	9600	— Set RS485/232 Slave Baud Rate		* RS232 Slave port device is provided on request
Network	Data Size:	8	— Stop Bit : default (8)		
Com Port	Parity:	None	— Set Parity (None/Even/Odd)		
Modbus TCP	Stop Bits:	1	— Set Stop Bit (1 / 2)		
Config.File	Modbus Setting				
Status	Unit ID:	0	— Set 0 = Allow All Slaves		
Console	Serial Rx timeout:	30	(x10ms) — Serial Poll Timeout in ms		
	TCP IP Rx Timeout:	100	(x10ms) — TCP Poll Timeout in ms		
	Update Settings				

Modbus TCP Settings

i) Modbus TCP to Modbus RTU

TrackSo		Modbus RTU / TCP Converter		WE-62C	
				Firmware Ver : 1.1.4	
Info	TCP Setting				
Device	Operating Mode:	TCP Slave - Modbus Master	— Modbus TCP to Modbus RTU		
Network	Protocol:	TCP	— Default TCP Protocol		
Com Port	IP Address:	192.168.1.100			
Modbus TCP	Port:	502	— Set TCP Device Port Number		
Config.File	Connect On Demand:	Disable	Disconnect socket after poll cmd/resp. — Connect - Once Data is Requested, then Closed		
Status	Data Mode:	Modbus RTU/TCP	— Converts the RTU to TCP, TCP to RTU Modbus Format		
Console	* In Transparent Mode - Acts Like Serial to Ethernet (Client Mode)				
	Update Settings				



Max No. of TCP Master in above mode: 1

Max No. of RTU Slaves in above mode: as per bus limit. (No hardcoded limit)

ii) Modbus RTU to Modbus TCP

192.168.1.100/login.html?page=login&action=login

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Modbus RTU / TCP Converter

WE-62C

Firmware Ver : 1.1.4

Info

Device

Network

Com Port

Modbus TCP

Config.File

Status

Console

TCP Setting

Operating Mode: Modbus Slave - TCP Master — **Modbus RTU to Modbus TCP**

Protocol: TCP — **Default TCP Protocol**

IP Address: 192.168.1.101 — **Modbus TCP Device IP Address (Slave Device IP)**

Port: 502 — **Set TCP Device Port Number**

Connect On Demand: Enable Disconnect socket after poll cmd/resp. — **Connect - Once Data is Requested, then Closed**

Data Mode: Modbus RTU/TCP — **Converts the RTU to TCP, TCP to RTU Modbus Format**
*** In Transparent Mode - Acts Like Serial to Ethernet (Client Mode)**

Update Settings

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Max No. of TCP Slave in above mode: 1
 Max No. of RTU Master in above mode: 1

Config.File

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Modbus RTU / TCP Converter

WE-62C

Firmware Ver : 1.1.4

Info

Device

Network

Com Port

Modbus TCP

Config.File

Status

Console

Configuration File operations

Save Save Current Configuration to flash

Upload Upload Firmware / Configuration file to Device
 File: Browse... No file selected.

Download Download System Configuration file from Device

Default Restore factory default settings

Reset Reset device

Save	Any Settings Updated, Have to Save the Configuration in Device
Upload	Update Firmware/Configuration file to the Device - File open Choose File
Download	Take Backup/Download the Configuration file from device to PC
Default	Restore the Factory Setting – Set by Manufacture

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Status

TrackSo		Modbus RTU / TCP Converter		WE-62C	
				Firmware Ver : 1.1.4	
Info					
Device	Network		IP Status		
Network	Local IP:	192.168.1.100	Tx Data Packet:	10	
Com Port	Remote Resolved IP:	192.168.1.100	Rx Data Packet:	11	
Modbus TCP	IP Connect State:	Cont. Fail	Tx Fail Count:	0	
Config.File			Rx Config Count:	0	
Status			Serial Status		
Console			Tx Data Packet:	11	
			Rx Data Packet:	9	
			Rx Fail Count:	2	
			Rx CRC Error Count:	0	

Console

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Modbus RTU / TCP Converter

WE-62C

Firmware Ver : 1.1.4

Info

Device

Network

Com Port

Modbus TCP

Config.File

Status

Console

Console

Rx Reply.
\$IPCFG,P10,5410EC3061F5,Model=WE-62C;Name=MODBUS-TCP CONV;ID=1;BootVer=MBC-E,HW:1.1,BC:1.1;FirmVer=M2TC-E,HW:1.1,SW:1.1.4;SysFile=OK;FactFile=OK;#

Tx Command.

Send

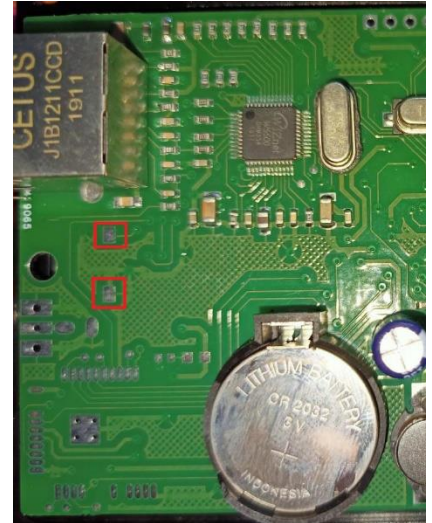
<Info.sys >
Send Device Config/Status Commands

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FAQ's

1) If user has forgotten the static IP assigned to the Converter then how to reset the IP ?

- a) Switch off Converter
- b) Open the casing of the logger.
- c) Short highlighted points using tweezer or a wire
- d) Reboot while shorting
- e) Reboot again after few seconds and converter IP will get reset to 192.168.1.100



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