Inhoud

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1. Modbus TCP

De Solaredge inverter is recommended to connect through Modbus TCP.
The Modbus TCP installation requires UTP cable from the interface to the Flexbox.
For extending the interfaces with Modbus TCP, a 24v switch is needed.

The data transfer for this interface goes with the IP address.
This IP address needs to be set on fixed.

2. Installation

The UTP cable needs to be in the interface and in the 24v switch, which is connected to the Flexbox.

The IP address needs to be configured in the same range as the IP address off the Flexbox. The IP address of the Flexbox can be found through an IP scanner of through CMD on your Windows laptop. Example: 192.168.1.xxx or 10.10.20.xxx

Once the Flexbox is installed and has a working network connection, the UTP cable can be installed in the Solaredge inverter. Use the SetApp to scan the QR code off the inverter and follow the instruction in the app until you are in the Inverter screen. Go to site communication and the menu which is show below is visible. Go to Modbus TCP-poort and switch in on. The port can be set to 502.

The IP address can be found at monitoring communication within the same menu. This IP address needs to be added in the configuration file.

3. Configuration

Configuration off a interface with the Oliva Flexbox will be done in the config file. The program Win SCP is necessary and the manual can be found on the portal.

In the config file, change the parameters which is shown below.

- Device ID are following up on each other in the config file
- Device type is filled in for the inverter
- Manufacturer is Solis
- Adress is where you fill in the IP address off the inverter(s)
- Unit id is 1 for each inverter
- Charge and discharge power will be set on the inverters limitations
  - Only necessary at Hybrid inverter
- Port becomes 502, necessary for Modbus TCP
- Protocol is Modbus TCP
- To activate the interface, set in use to TRUE

```
"solaredge_inverter_tcp": {
    "device_id": [0,1,2,23,24,25,26,27,28,29],
    "device_type": "inverter",
    "manufacturer": "solis",
    "address": ["", "", "", "", "", "", "", "", "", ""],
    "unit_id": [1,0,0,0,0,0,0,0,0,0],
    "charge_power": 0,
    "discharge_power": 0,
    "port": 0,
    "protocol": "modbus_tcp",
    "in_use": "FALSE"
```

4. Final check

After the configuration has been done, log in into the HMI and check the Acrel 3Ph page to see if the data is showing in the portal. If data is showing, the interface is installed correctly.

SolarEdge Inverter(s)

Last Updated: 11:48:52Z

Voltage A:	230.5 V
Voltage B:	231.3 V
Voltage C:	232.0 V
Current :	130.8 A
Current A:	43.6 A
Current B:	43.6 A
Current C:	43.5 A
Active Power:	30347.0 W
Reactive Power:	5519.6 VAr
Apparent Power:	30364.0 Va
Active Inverter Limit:	100 %
Calculated Inverter Limit:	100.0%
pv Generation:	30809.0 W
pv Generation today:	Wh

Status:	Inverter is ON and producing power
Peak Power:	82800 W
Power Factor:	555.430
Dynamic Power enabled:	🟢
Advanced Power ctrl enabled:	🟢
Reactive Power Ctrl:	0 Should be > 0, 0 m no power ctrl is pos