

Configuration Manual — SMA PV Inverter

Version:2023.3.1





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1. Introduction

These instructions are used to configure the following SMA PV inverters:

- SMA SUNNY BOY 1.5 / 2.0 / 2.5
- SMA SUNNY BOY 3.0 / 3.6 / 4.0 / 5.0 / 6.0
- SMA SUNNY TRIPOWER 3.0 / 4.0 / 5.0 / 6.0
- SMA SUNNY TRIPOWER 8.0 / 10.0
- SMA SUNNY TRIPOWER 15000TL/20000TL/25000TL
- SMA SUNNY HIGHPOWER PEAK3
- SMA SUNNY TRIPOWER CORE1



The latest firmware should always be installed

2. Configuration



Before configuring the PV inverter, make sure that it has been installed properly. Use the manufacturer's installation instructions for this.

To integrate into the FEMS, please configure the device via the web interface. You can access this by calling up the IP address of the inverter in the browser. We recommend setting the assignment of the IP address to "Automatic" when commissioning the device.



To be able to access the web interface, your PC/notebook/smartphone must be in the same network as the inverter.

2.1. IP address

The connection between FEMS and the PV inverter is always established via the customer network. For this purpose, the IP address of the PV inverter is stored statically in FEMS. It is therefore necessary that the IP address of the PV inverter never changes.

- Variant 1: Configure the SMA PV inverter according to the instructions so that it is assigned a static IP address.
- Variant 2: Configure the inverter according to the instructions so that it is assigned a dynamic/automatic IP address and additionally configure the DHCP server in the customer network (cf. your router's documentation) so that the inverter is always assigned the same IP address.

2.2. Ping test

To test the correct configuration of the IP address, we recommend pinging the inverter in the local customer network.

In the example below, the IP address 192.168.188.40 was set for the inverter in the configuration.



```
PING 192.168.188.40 (192.168.188.40) 56(84) bytes of data.
64 bytes from 192.168.188.40: icmp_seq=1 ttl=64 time=3.23 ms
64 bytes from 192.168.188.40: icmp_seq=2 ttl=64 time=1.89 ms
64 bytes from 192.168.188.40: icmp_seq=3 ttl=64 time=3.08 ms
64 bytes from 192.168.188.40: icmp_seq=4 ttl=64 time=0.889 ms

--- 192.168.188.40 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 6ms
rtt min/avg/max/mdev = 0.889/2.273/3.229/0.952 ms
```

Figure 1. Ping test

If the inverter cannot be reached via ping, check the settings under IP address.

2.3. Modbus/TCP

Make the following settings according to the instructions:

- 1. Switch on TCP server
- 2. Set port to 502
- 3. Set unit ID to 3



3. Contact

For support, please contact:

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Phone — Service: +49 (0) 9903 6280 0 E-Mail — Service: service@fenecon.de



4. Directories

4.1. List of illustrations

Figure 1. Ping test