



Configuration Manual — KOSTAL PV Inverter

Version:2023.3.1

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1. Introduction

1. Introduction

These instructions are used to configure the following KOSTAL PV inverters for integration into the FENECON Energy Management System ([https://fenecon.de/fenecon-fems/\[FEMS\]](https://fenecon.de/fenecon-fems/[FEMS])):

- [https://www.kostal-solar-electric.com/de-de/produkte/solar-wechselrichter/plenticore-plus/\[PLENTICORE plus 3.0 - 10.0\]](https://www.kostal-solar-electric.com/de-de/produkte/solar-wechselrichter/plenticore-plus/[PLENTICORE plus 3.0 - 10.0])
- [https://www.kostal-solar-electric.com/de-de/produkte/solar-wechselrichter/piko-iq/\[PIKO IQ 3.0 - 10.0\]](https://www.kostal-solar-electric.com/de-de/produkte/solar-wechselrichter/piko-iq/[PIKO IQ 3.0 - 10.0])
- [PIKO CI 30 - 60](#)

2. Prerequisites

Only KOSTAL inverters of the model series mentioned in the [Introduction](#) with at least the following firmware versions are supported:

- PLENTICORE plus
 - UI version: 01.18.05255 or higher
 - MC version: 01.47 or higher
 - IOC version: 01.45 or higher
 - HW version: 0101 or higher
- PIKO IQ
 - UI version: 01.21.06586 or higher
 - MC version: 01.60 or higher
 - IOC version: 01.60 or higher
 - HW version: 0100 or higher
- CI
 - Latest firmware (at least V3.10 - 2022.11.04), see [https://www.kostal-solar-electric.com/de-de/download/download/#Solar-Wechselrichter/PIKO%20CI/Deutschland/Update/\[here\]](https://www.kostal-solar-electric.com/de-de/download/download/#Solar-Wechselrichter/PIKO%20CI/Deutschland/Update/[here])

You can read out the SW versions of the device via [[Info](#)].

Info

Gerät	
Name	scb
Typenbezeichnung	PLENTICORE plus 5.5
Seriennummer	
Artikelnummer	
UI-Version	01.18.05255
MC-Version	01.47
IOC-Version	01.45
HW-Version	0101
Richtlinie	DE VDE4105 cosphi(P)
Batterieeingang	gesperrt

Figure 1. KOSTAL web interface - Info

3. Inverter configuration

To integrate the device into the FEMS, please configure it 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.

3.1. Network

3.1. Network

1. [Settings] → [Network]

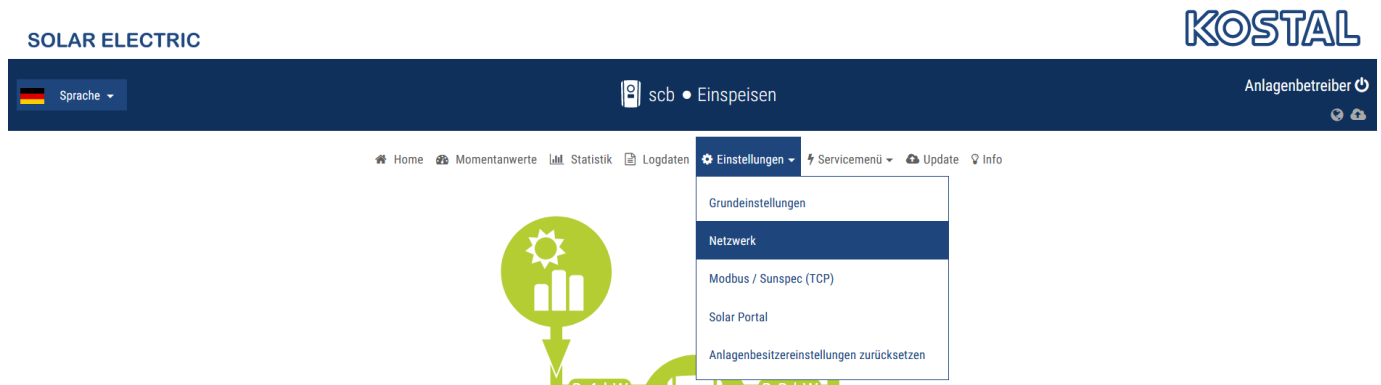


Figure 2. KOSTAL web interface - Settings - Network

2. Make the following settings here:

 [Obtain IPv4 address automatically]

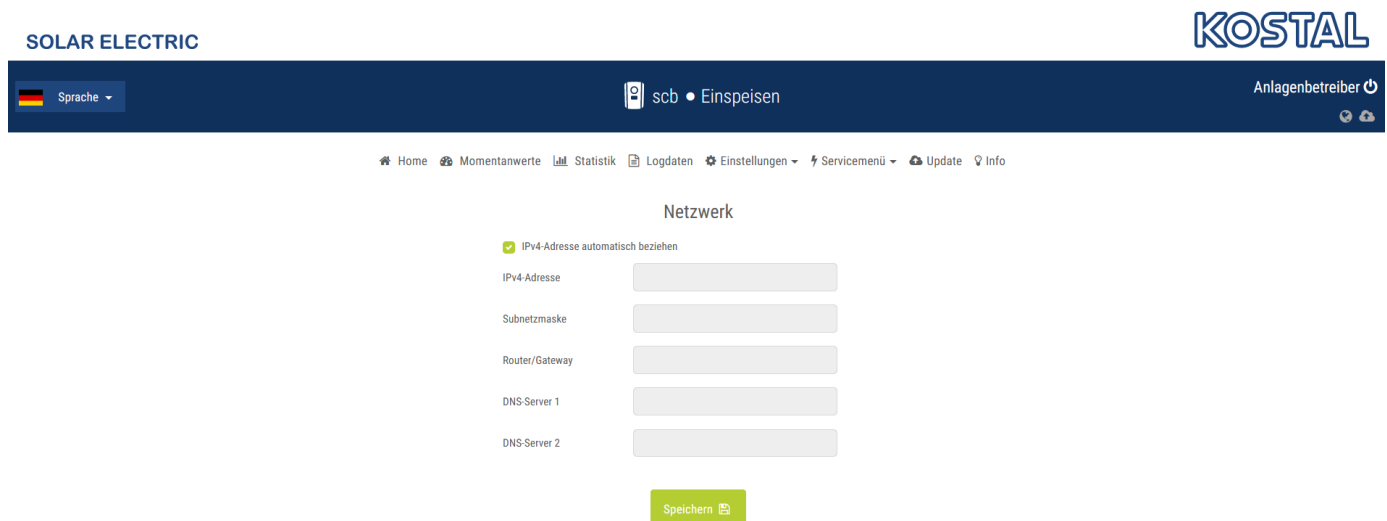


Figure 3. KOSTAL web interface - Settings - Network

We recommend deactivating DHCP for the inverter in the router settings so that it always retains the same IP address.

3.2. Ping test

To test the configuration, we recommend pinging the inverter in the local customer network.

In the example below, the inverter uses the address **192.168.178.59**.

```
PING 192.168.178.59 (192.168.178.59) 56(84) bytes of data.
64 bytes from 192.168.178.59: icmp_seq=1 ttl=64 time=5.34 ms
64 bytes from 192.168.178.59: icmp_seq=1 ttl=64 time=7.34 ms (DUP!)
64 bytes from 192.168.178.59: icmp_seq=2 ttl=64 time=5.13 ms
64 bytes from 192.168.178.59: icmp_seq=3 ttl=64 time=3.77 ms
64 bytes from 192.168.178.59: icmp_seq=4 ttl=64 time=2.02 ms

--- 192.168.178.59 ping statistics ---
4 packets transmitted, 4 received, +1 duplicates, 0% packet loss, time 6ms
rtt min/avg/max/mdev = 2.017/4.720/7.342/1.768 ms
```

Figure 4. KOSTAL Ping Test

If the inverter cannot be reached via ping, please check the [\[network\]](#) settings.

3.3. Modbus

1. [\[Settings \]](#) → [\[Modbus/Sunspec \(TCP\) \]](#)



Figure 5. KOSTAL web interface - Settings - Modbus

2. Make the following settings here:

- ❓ [\[Activate Modbus \]](#)
- ❓ [\[byte order \]](#) → [\[big-endian \(ABCD\) Sunspec \]](#)
- ❓ [\[Modbus Port \]](#) → [\[1502 \]](#)
- ❓ [\[Unit Id \]](#) → [\[71 \]](#)

3.3. Modbus



Figure 6. KOSTAL web interface - Modbus/Sunspeg (TCP)

4. Contact

For support, please contact:

FENECON GmbH
Gewerbepark 6
94547 Iggenbach

Phone — Service: +49 (0) 9903 6280 0

E-Mail — Service: service@fenecon.de

5. Directories

5. Directories

5.1. List of illustrations

Figure 1. KOSTAL web interface - Info

Figure 2. KOSTAL web interface - Settings - Network

Figure 3. KOSTAL web interface - Settings - Network

Figure 4. KOSTAL Ping Test

Figure 5. KOSTAL web interface - Settings - Modbus

Figure 6. KOSTAL web interface - Modbus/Sunspec (TCP)