

## Putting the GSM modem into operation

Before you can use a GSM modem, you need a SIM card. The GSM-Link software allows you to use a mobile provider of your choice.

The following points should be borne in mind when buying and using a SIM card:

- The tariff must allow packet data communication via GPRS.
- Prepaid cards that have to be topped up by calling a service number from a mobile phone are not suitable.
- With prepaid tariffs please note that you require a top-up option (for recharging the card) that does not require direct entry of a code on a mobile phone.
- Tariffs that stipulate specific times for the data download are not suitable for use with the modem.
- Tariffs which require flexible booking of a specific amount of time or data are also not suitable.
- We recommend a tariff with a data volume of approx. 5 MB per month and inverter.
- Manual configuration of the data settings (APN etc.) must be supported.
- The SIM card must be activated prior to installing it in the modem (e.g. by testing it in a mobile phone prior to installation in the modem).

Note: Before purchasing a SIM card, discuss all of the points above in detail with your mobile provider and make sure that you obtain all the necessary access data. The necessary tariff details (APN, user name and password) will be provided directly by the respective mobile provider.

### Opening the unit

Only a qualified electrician may open and perform work on the unit.



Fatal voltages are produced in the inverter during operation.

- Switch off the unit completely (DC side and AC side) before all work.
- Wait at least five minutes after switching off until the condensers have discharged.

### Procedure:

- Please download the “GSM-Link” software from the “Service => Download” area at <http://www.kostal-solar-electric.com>
- Switch off the inverter and wait for approx. 3-5 minutes.
- Open the cover (this should only be performed by trained specialist staff).
- Connect the Ethernet cable to the communication board (RJ45 interface (network connection)) and to your PC. In the case of a direct connection (inverter with a PC – without a switch), a crossover cable must be used.
- Switch on the inverter.
- In your Internet browser, enter the serial number, the inverter name or the IP address in the address line to access the inverter’s Web server

(Note: Always add an **S** in front of the serial number; see the example in the screenshot in Fig. 1).

- On the “Settings” page, enter the PIN for the SIM card in the “GSM PIN” field.
- Start the “GSM-Link” software.

Fig 1: GSM-Link

- In the Inverter section, enter the serial number or the IP address of the inverter in the “Host/IP address:” field (Note: Always add an **S** in front of the serial number; see the example in the screen shot in Fig. 1).
- In the GSM section, enter the SIM card data (APN, user name and password) in the appropriate fields and confirm your entries by clicking on “Write new settings”.
- Switch off the inverter and wait for approx. 3-5 minutes.
- Slide the SIM card into the GSM modem.
- Plug the GSM modem into the communication board.
- Connect the GSM antenna to the GSM modem.
- Switch on the inverter and wait for approx. 2 minutes.
- In your Internet browser, enter the serial number, the inverter name or the IP address in the address line to access the inverter’s Web server.
- Check the current modem status on the “info page”.

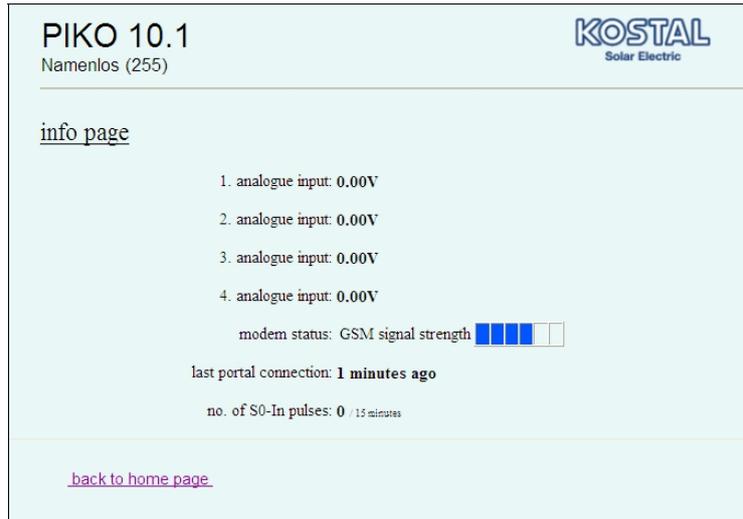


Fig. 2: info page

If the “Modem status: GSM signal strength” field (see Fig. 2) indicates two or more vertical bars, the connection is OK.

### Setting up the KOSTAL PIKO Solar Portal

- Now switch to the “Settings” page in the inverter.

PIKO 10.1  
Namenlos (255)

**settings** ver 3.70

S no.: 90392XXXXXXXX

item number: 10017250

language: English

name: Namenlos

RS485 inverter address: 255 (1..220)

data acquisition all 15 minutes

switched output function: S0 pulse (S0/AL-Out)

internal consumption: power limit 1100 W

stable positive deviation from the limit 45 minutes

run time 60 minutes

function of analogue inputs: sensors

network:  Auto IP / DHCP

manual network configuration:

inverter IP address: 192 . 168 . 1 . 1

subnet mask: 255 . 255 . 255 . 0

external router (must be placed in same subnet)

router address: 192 . 168 . 1 . 254

DNS address: 145 . 253 . 2 . 203

public line: (only for analog modem and PBX)

GSM PIN: \*\*\*\*

new login password: repeat:

Portal-Code:

data export:  Portal: -

accept

Fig. 3: The "Settings" page

- In the "Portal Code" field enter the portal code **P3421**.
- Confirm your entry by clicking on "Accept".

This entry establishes a connection to the KOSTAL PIKO Solar Portal. To check that the connection is working, please proceed as follows:

- In the "Portal Code" field enter **go online**.
- Confirm your entry by clicking on "Accept".
- Call up the "info page".

If a value in minutes is displayed in the "Last connected to the portal" field (see Fig. 2), the connection to the KOSTAL Solar Portal has been established.

**IMPORTANT: An inverter must first log on to the portal (using "go online"), before a system can be set up in the portal and before the inverter can be added to a system.**