Solar Heating Rod WIFI PRO

Store surplus PV energy as hot water. The fothermo Solar Heating Rod WIFI PRO uses surplus electricity from larger grid-connected photovoltaic systems and adjusts its heating output automatically.



Made in Germany

Solar Heating Rod WIFI PRO

0–3000 W	G 1½"	230 V AC
continuously variable heating output	standard thread	with WIFI communication

More sunshine. Lower energy costs.

Reduce energy costs

Use surplus electricity from the PV system to heat water.

Reduce hot water costs

Solar heat reduces the load on your gas, oil or pellet heating system and your heat pump.

Retrofit an existing tank

For suitable tanks with a G 1½ ″ connection. Check the installation space.

Easy to install and use

Screw into a suitable tank, connect the Schuko plug and configure the app. Read the water temperature.

Technical data

One heating element is controlled continuously from 0–1 kW. Two further heating elements are switched on in sequence at a fixed 1 kW each. This adjusts the total output from 0–3 kW to the available PV surplus.

Control principle

0–1 kW
Continuously controlled heating element

1 kW
First additional switched heating element

1 kW
Second additional switched heating element

Electrical data

Parameter	Specification
Number of heating elements	3 units
Nominal power per heating element	1 000 W
Total heating output	0–3 000 W
Power supply	230 V AC, 50/60 Hz
Maximum current consumption	13.1 A at maximum heating output
Heating resistance	52.9 Ω per heating element
Communication protocols	REST API, Modbus TCP
Communication partners available at market launch	Shelly, Stromleser One

Normal operation

In normal operation, the WIFI PRO adjusts its heating output to the measured surplus from the photovoltaic system. The control system adapts the output automatically, using up to 3 kW to heat water. An individually adjustable power limit allows the maximum heating output to be reduced as required. The measured surplus is therefore used up to the selected limit and stored as heat in the hot water tank. When no PV surplus is available, heating remains off in this operating mode.

Optional reheating

Reheating can be activated when solar energy is insufficient. If the water temperature drops below the defined minimum, heating starts automatically using electricity from the 230-V mains connection.

Product and equipment

General data

Parameter	Specification
Overall length	52.5 cm
Width	15 cm
Height	10 cm
Weight	1.25 kg
Screw-in thread	G 1½ ″ (6/4 ″)
Installation position	Horizontal
AC connection	Schuko plug
Heating element length	35 cm
Unheated element length	5 cm
Operating temperature range	−10 °C … 35 °C
Storage temperature range	−10 °C … 35 °C
Degree of protection	IP20
Guarantee	2 years



Solar Heating Rod WIFI PRO
Side view

Operation and product view



Solar Heating Rod WIFI PRO
Front view

Settings in the fothermo app

Set temperature limits

Adjust the temperature limits to suit your hot water needs.

Set heating output

Choose how much power may be used to heat water.

View operating status

Check the current operating status of your heating rod conveniently in the app.

Activate reheating

Enable automatic reheating with mains electricity whenever needed.

Status indicators on the housing

The three LEDs on the housing show at a glance whether the heating rod is switched on in the app, a WIFI connection is established or a fault is present.

Indicator	LED colour	Meaning
Operation	Green	Lights up when the heating rod is switched on in the fothermo app.
Wi-Fi	Blue	Lights up when a WIFI connection is established.
Fault	Red	Lights up when a fault is present.

Installation and scope of supply

Connect the mains supply

Connect the heating rod to the 230-V AC supply using the Schuko plug.

Set up communication

Connect to the local Wi-Fi network. Set up communication via REST API or Modbus TCP. Communication partners available at market launch: Shelly and Stromleser One.

Check before installation

01 **Tank and installation space**

Check the G 1 1/2 inch connection and installation space for the 35 cm heating element. Install the heating rod horizontally.

02 **Installation and commissioning**

Installation by qualified persons according to the instructions. Ensure earthing and protective devices are in place. Fill the tank completely before connecting the AC supply. Do not operate dry.

Scope of supply

Heating rod with housing and Schuko plug.

Safety and quick start guide

Quick installation guide

Additional components required

A compatible energy meter or energy reader (Shelly or Stromleser One) to measure PV surplus, a local Wi-Fi network and a suitable hot water tank.

This datasheet does not replace the installation, operating and maintenance instructions. Observe all installation, operating and safety information in the instructions.