

PHOTOVOLTAIC CARAVAN BOILER



Hot water anywhere in the world. Only through the power of the sun!



Photovoltaic

Hot water via free photovoltaic electricity.



Battery operation

Use of surplus energy from a 12 V or 24 V battery to heat the water.



Easy installation

Only the connection of 2 cables is necessary.



Renewable hot water

100% renewable hot water supply through the power of the sun.



Made in Germany

Developed and produced in Germany.



No fossil fuels

Gas smell or exhaust fumes during water heating are a thing of the past.



Anti-freeze

Easy draining of the water in winter.



Flexible assembly

The boiler can be installed horizontally or vertically.



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directly from the photovoltaic module or from a rechargeable battery. The annual gas test at the TÜV, the regular purchase of new gas bottles or the refuelling of diesel for hot water production are now a thing of the past. The photovoltaic boiler produces hot water free of charge, climate-neutral and independent of fossil fuels.

Freedom - hot showers in the most beautiful places in the world.

A hot shower after an eventful day of hiking or sightseeing in the city makes travelling much more pleasant. The photovoltaic boiler warms up during the day so that a hot shower can be enjoyed immediately after returning to the caravan.

Simplicity - the all-round carefree package.

No desire to study electrical engineering when installing the boiler? No problem - the photovoltaic boiler only needs to be connected via a cable. Either to the photovoltaic module or to the battery. The boiler takes care of the rest. No further system components are required. A patented MPP tracker and intelligent algorithms of the integrated deep discharge protection ensure an all-round carefree package.

2 digital displays

All important data at a glance. A second display with a 5-metre cable length allows the temperature to be displayed from anywhere in the caravan.

Innovative technology

12 V / 24 V battery or photovoltaic module connection. Up to 1500 Wp photovoltaic connected load. Intelligent algorithms ensure a hot shower experience.

10 litre volume Easy assembly

... provide enough hot water for showering. With economy shower head also easy for 2 people.

Two mounting rails ensure a secure hold. It does not matter whether the boiler is mounted on the wall or on the vehicle floor.

DATA SHEET



Photovoltaic Caravan Boiler	Unit	Value	
Model number	-	CPVB-10	
Volume	l	9,5	
Max. Heating capacity	W	550	
Max. Power consumption	А	15,5	
Energy consumption (heating process from 15 °C - 65 °C)	Wh	580	
Energy class	-	A+	
Maximum pressure	Bar	7	
IP class	-	X1	
Weight(+/- 3 %)	kg	7,8	
Max. Water temperature	°C	65	
Adjustable temperature range for optional reheat function	°C	10 - 65	
Integrated MPP tracker & reverse polarity protection	-	yes	
Digital display on the boiler	-	yes	
Temperature display with 5 metre cable	-	yes	
Boiler tank	-	Steel	
Protective coating, safety guard		Enamel, magnesium anode	
CE - Certificate	-	yes	
Boiler dimensions (length x width x height)	cm	40 x 30 x 33	
Min. installation dimensions (length x width x height)		53 x 30 x 33	
Water connection	-	G½ (M)	
Overpressure and non-return valve	-	Included in delivery	
Photovoltaic			
Recommended photovoltaic output	W_p	150 – 300	
Max. connected photovoltaic power	W _p	1500	
Max. Open-circuit voltage (according to data sheet)	V _{oc}	42,4	
Battery			
Voltage	V	12 or 24	
Battery type	-	Lead, LiFePo4	

Heating times	Power	°C/h
12 V Battery	ca. 90 W	8 °C/h
24 V Battery	ca. 350 W	32 °C/h
100 W (Photovoltaic-) Power	100 W	9 °C/h
200 W (Photovoltaic-) Power	300 W	27 °C/h
550 W (Photovoltaic-) Power	550 W	47 °C/h



INSTALLATION

Photovoltaic module or battery?

Both work!

A 12 V or 24 V battery as well as one or more photovoltaic modules can be connected to the photovoltaic boiler. To put the boiler into operation, simply connect the power cable of the boiler to the energy source.

Use the energy surplus of the battery.

If the boiler is connected to a battery, two modes can be selected:



Use surplus energy: The boiler only switches on automatically when the connected battery is fully charged.



Surplus energy + reheating: In the second mode, the boiler can also be reheated via the battery if the water is too cold. be reheated via the battery if the water should ever get too cold. The battery is discharged in the process. From about 50% residual capacity of the battery, the heating process is automatically terminated so that there is still enough energy available for light, refrigerator or mobile phone charging.

Water connection - made easy!

Water potion and pump

That's all you need! A pump takes the water from the water tank and provides the necessary water pressure if required.

Regulation of the water temperature

To ensure that the water does not come out of the tap too hot, a commercially available tap can be used to regulate the temperature.

Standard 1/2 inch thread

Standard ½ inch threads ensure easy and intuitive connection of the water supply. Suitable hoses can be purchased at any DIY store.

25 litres hot water

Use up to 25 litres of hot water for showering. The maximum temperature of the boiler is 65 °C. If the hot water is mixed with colder water (e.g. 15 °C), up to 25 litres with a pleasant shower temperature of 35 °C can be taken from the boiler.



