

# Photovoltaic Water Heater

Water tank 10 to 80 liters

PVB-10 | PVB-30 | PVB-80



The Photovoltaic Water Heater combines comfort with sustainability.

Enjoy hot water - with the power of the sun.



## RENEWABLE

Energy from the power of the sun. 100% renewable and sustainable. Save CO2 every day and actively contribute to climate protection.



## COST SAVING

Hot water through almost free photovoltaic electricity. High economic efficiency due to low initial investment costs and almost no operating costs.



## ON- & OFF-GRID USE

Hot water independent of the power grid and without registration of the photovoltaic system.



## PLUG & PLAY

Photovoltaic modules are connected by simple plug and play connections. No electrician is needed.



## DIGITAL DISPLAY

An LC Display provides information of the system, such as the water temperature and the incoming solar power.



## EASY INSTALLATION

Low installation costs: cables instead of pipes.



## 3 YEARS PRODUCT WARRANTY



## MADE IN GERMANY

Specifications	unit	10 liters	30 liters	80 liters
<b>Photovoltaic Water Heater</b>				
Product name	-	PVB-10	PVB-30	PVB-80
Volume	l	10	30	80
Max. heating power	W	550	550	550
Max. current consumption	A	15.5	15.5	15.5
Energy efficiency class	-	A+	A+	A+
Rated pressure	MPa	0.7	0.7	0.7
IP class	-	X1	24	24
Gross weight (+/- 3 %)	kg	7.2	15	25
Max. water temperature	°C	65	65	65
Adjustable water temperature range for optional reheating function	°C	10 – 65	10 – 65	10 – 65
Integrated MPP tracker	-	yes	yes	yes
Integrated reverse polarity protection	-	yes	yes	yes
Digital display	-	yes	yes	yes
Boiler prepared for external reheating and battery connection	-	yes	yes	yes
Boiler made of steel with enamel coating	-	yes	yes	yes
CE – certification	-	yes	yes	yes
Dimensions (length, width, height)	cm	28 x 28 x 44	40 x 40 x 60	47 x 48 x 90
Water connection	-	G½ (M)	G½ (M)	G½ (M)
Check and pressure relief valve	-	yes	yes	yes
<b>Photovoltaic Input</b>				
Recommended photovoltaic power	$W_p$	100 – 300	300 – 600	600 – 1200
Max. connected photovoltaic power	$W_p$	1500	1500	1500
Max. open circuit voltage at 25°C	$V_{oc}$	42.4	42.4	42.4
Photovoltaic connector	-	MC4	MC4	MC4

Note: Only 36-cell and 60-cell photovoltaic modules can be connected to the water heater.

## Heating times depending on the photovoltaic power

The following table shows the duration for heating up the different sizes of water heaters with different heating power, starting with a water temperature of 15°C and ending at 65°C.

Photovoltaic Power	10 liters	30 liters	80 liters
~ 200 W	~ 3 hours	~9.5 hours	~ 24.5 hours
~ 400 W	~ 1.5 hours	~ 4.5 hours	~ 12.5 hours
~ 550 W	~ 1.25 hours	~ 3.75 hours	~ 9 hours
~ 550 W ... 1500 W	~ 1.25 hours	~ 3.75 hours	~ 9 hours

Note: The values given in the table are intended as a guideline. The heating times depend on many factors (power, ambient air temperature, water withdrawal) and may differ from reality. The greater the connected photovoltaic power, the more the water can be heated on days with low solar radiation. The water is heated with a maximum power of 550 W.