

SOLAR STANDSPEICHER DATASHEET

PRODUCT NAME:

Solar Standspeicher

PRODUCT MODEL:

PVB-200 / PVB-300

CATEGORY:

Water heater



HOT WATER THROUGH PHOTOVOLTAICS

The fothermo Solar Standspeicher produces hot water directly from connected photovoltaic modules. With up to three MPP trackers, it efficiently uses available solar energy and reduces the energy needed for hot water preparation. The integrated heat exchanger allows connection to existing gas, oil, or pellet heating systems. As an off-grid system, it operates without grid feed-in and can be commissioned without an electrician.

IMPORTANT FEATURES

- Reduce energy costs by relieving the heating system
- Direct connection of the photovoltaic modules
- Three integrated MPP trackers for maximum photovoltaic power utilization
- Integrated heat exchanger for connection to a gas, oil, or pellet heating system
- Easy PV installation without an electrician

TECHNICAL DATA

Parameters	Details
Volume group	200 L 300 L
Heating power per tracker	550 W
Number of MPP trackers	3
Max. heating power	1650 W
Max. water temperature	65 °C
Nominal pressure	0,8 PA
Material	Enamel, steel
PV module connection	Screw terminal
IP protection class	IP24
CE certification	✓
Reverse polarity protection	✓
Energy efficiency class	B
Color	Anthracite Black

SIMPLE.

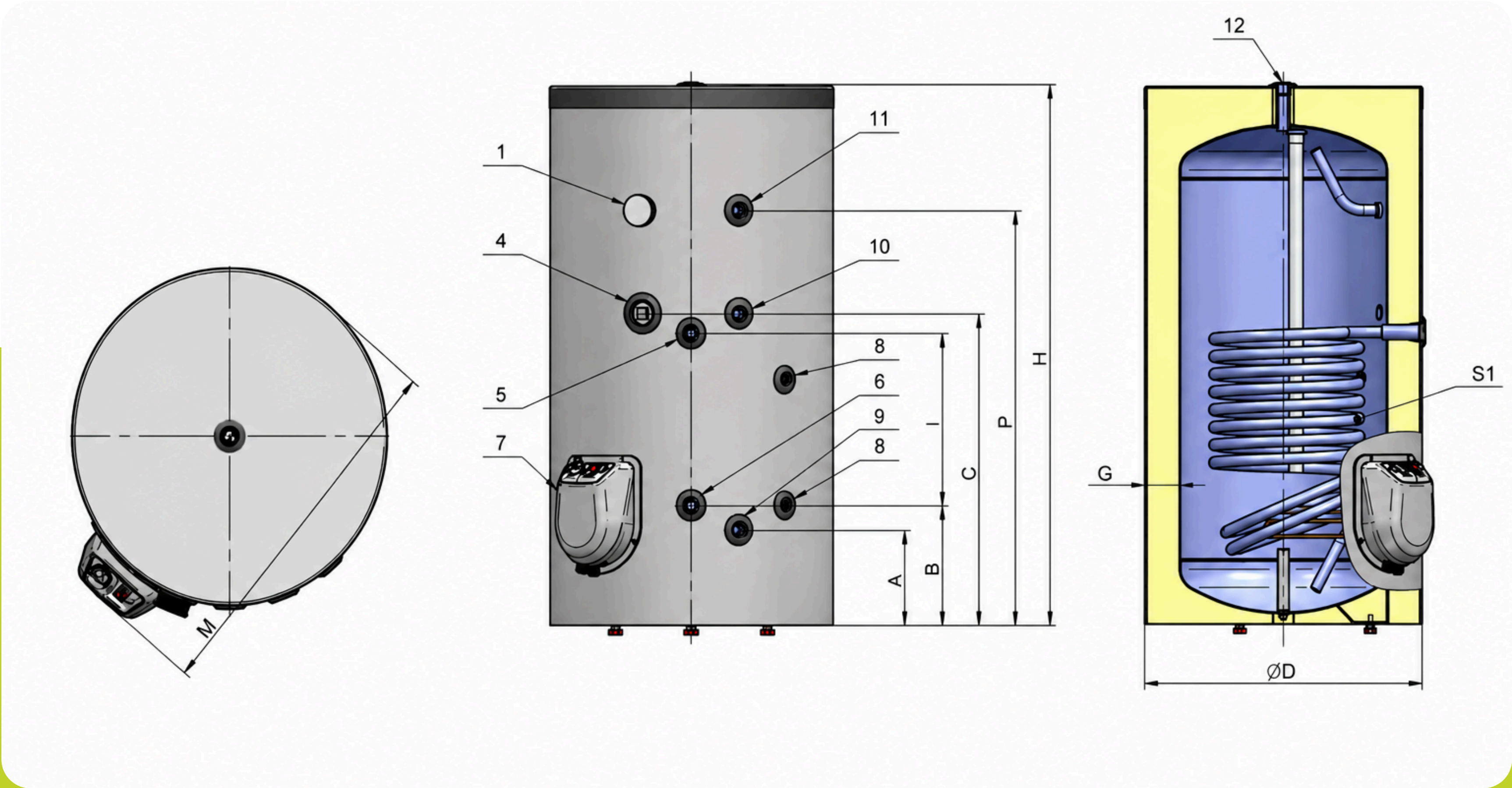
- Plug & Play – quick setup
- No electrician required
- Easy to retrofit
- Flexible installation

ECONOMIC.

- Permanently reduce energy costs
- Use solar power efficiently
- Reduce heating load in summer
- Low running costs

INDEPENDENT.

- Hot water from own solar energy
- Off-grid – no registration
- No grid feed-in required
- Hot water for up to 6 people



Properties	PVB-200	PVB-300
Volume	186 L	264 L
Weight (± 3 %)	74 kg	88 kg
Max. PV connection power	6000 Wp (3x 2000 Wp per MPP-Tracker)	
Max. PV current draw	15.5 A, automatic current limiting (direct current)	
Max. PV open-circuit voltage	50 V (Parallel connection of PV modules)	
Protective anode	Yes, replaceable magnesium anode	
Integrated heat exchanger	Yes, for connection to a gas, oil or pellet heating system	
Max. heat losses	47,5 W	50,2 W

Dimensions	PVB-200	PVB-300	Dimensions	PVB-200	PVB-300
A	210 mm	210 mm	H	1430 mm	1605 mm
B	260 mm	265 mm	I	550 mm	530 mm
C	855 mm	840 mm	M	690 mm	760 mm
D	600 mm	670 mm	P	1155 mm	1315 mm
G	75 mm	85 mm			

Connections	PVB-200	PVB-300
1: Thermometer		✓
4: Additional connection		G 1½ F
5: S1 – Supply		G ¾ F
6: S1 – Return		G ¾ F
7: Flange with heating element		✓
8: Thermostat connection		G ½ F
9: Fresh water inlet – drain		G ¾ F
10: Circulation		G ¾ F
11: Hot water outlet		G ¾ F
12: Hot water outlet		G ¾ F

HEAT EXCHANGER	PVB-200	PVB-300
Nominal pressure		1 MPa
Max. temperature of the heating fluid		110°C
Max. temperature in the tank heated by the heat exchanger		95°C
Area		0,90 m²
Volume	4,3 L	5,4 L
NL [2]	3,6	8
Continuous output according to DIN 4708	25 kW	35 kW
Flow rate according to DIN 4708	10 L/min	14 L/min
Output according to EN 12897	18,6 kW	19,3 kW
Heating-up time according to EN 12897	28,8 Min	39,4 Min
Pressure drop	120 mbar	50 mbar
Maximum amount of discharged water MIX 40 °C according to EN 12897	286 L	406 L

Integration into the gas / oil heating system

The Solar Standspeicher replaces a conventional hot water storage tank. The water is primarily heated by the integrated solar heating elements. If sunlight is insufficient, a temperature sensor inside the tank detects the low temperature, and the heating system automatically heats the water to the set temperature.