SOLAR KERBEROS 250.B 250.S 320.B 320.H

UNITES

PHOTOVOLTAIC WATER HEATING

The SOLAR KERBEROS system is used for economical water heating. It takes advantages of the **photovoltaic storage heating** and the top technology of **maximum power point tracking (MPPT).**

The SOLAR KERBEROS system provides for the **maximum use** of energy generated by photovoltaic modules and **minimizes consumption** of mains energy through the smart water heating control. The high efficiency is achieved by utilising a maximum power point tracking DC/DC converter. Photovoltaic water heating by SOLAR KERBEROS nevertheless brings **many other benefits.**

BENEFITS

- Even more savings thanks to innovative technology
- High efficiency
- Suitable for any type of hot water tank
- Low roof load
- Efficient operation also during winter
- Easy and cost-efficient installation
- Fully autonomous system (even during a power cut)
- Simple programmable timer of heating (versions 320)
- Potential PV energy surplus usage
- Clear touch display
- Simple intuitive operating
- Power supply backup for electrical devices
- Produced and consumed power gauging
- Developed and made in Czech Republic
- Patented technology

APPLICATION AREAS

- **Water heating**
- Pump back-up
- LED lighting
- Emergency lighting
- Security systems

WHERE TO USE SOLAR KERBEROS

- Residential properties
- Apartment buildings
- Holiday homes
- Commercial buildings
- Industry - water heating for technological purposes
- Companies with high consumption of hot water
- Stadiums, sports venues
- Water parks, wellness centres

Innovative **energy saving** solutions

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Technical data

Electric data – photovoltaic	250.B, 250.S	320.B, 320.H
Input open circuit voltage (limits)	185 - 280 VDC	200 - 340 VDC
MPP tracking range	120 - 260 VDC	140 - 310 VDC
Maximum output current	8 A	9 A
Maximum efficiency	99 %	99 %
Recommended wiring	6 x 250 Wp	8 x 250 Wp

Different number of PV modules and different module power than recommended are feasible but maximum input voltage limit must be strictly kept at any solar irradiation and temperature.

Electric data – mains electricity	
Input voltage	230 V AC 50 Hz
Maximum output current	13 A

Heating element		
Power	Recommended power of heating element	2 - 2,5 kW

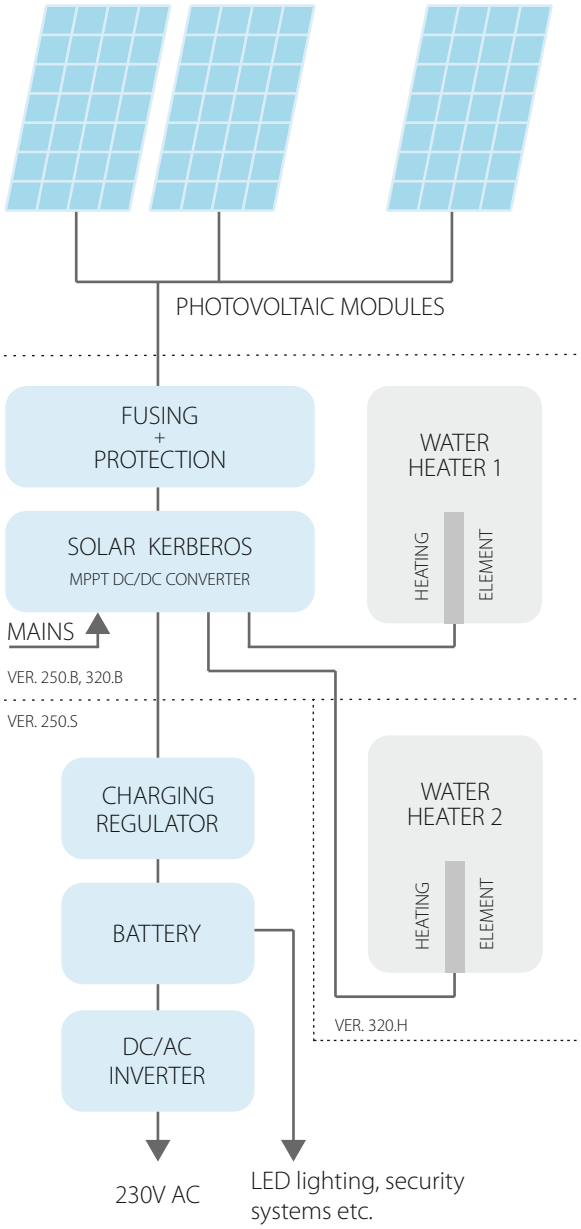
Secondary heating element (320.H)		
Power	Recommended power of heating element	2 - 2,5 kW

Extra output for charge controller (250.S)	
Output voltage	Maximum voltage adjustable in range 13 – 40 V
Maximum output current	8 A

Thermal regulators	
Setting range	10 - 80°C
Thermal fuse	Yes - electronic

Working conditions	
Operating temperature	+5 to +40°C
Storage temperature	-10 to +40°C
Operating rel. humidity	Max 75 % non condensing
Storage relative humidity	Max 90 % non condensing
Environment dustiness	Dust particles volume max 0,75 mg/m³
Chemical effects	Non aggressive

Construction parameters	250.B, 250.S	320.B, 320.H
Dimensions	385x323x100 mm	395x322x105 mm
Weight	5 800 g	6 100 g
Ingress protection	IP 20	IP 20



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