

PHOTOVOLTAIC WATER HEATING

The KERBEROS POWER system is used for economical water heating. It takes full advantage of **photovoltaic storage heating** and top-level technology for **maximum power point tracking (MPPT)**.

KERBEROS POWER is a **high-performance** modular photovoltaic water heating system. It is designed for ~8 kWp of installed photovoltaic power. It operates with **standard heating elements** with an output of 2 - 2.5 kW for each of maximum 3 modules. The water is heated **solely by solar energy**, the grid is being used only to supply control and communication modules. The power section operates in **off-grid mode**, the photovoltaic section is **isolated from the grid**.

BENEFITS

- Even more savings due to innovative technology
- High efficiency
- Suitable for any type of hot water tank
- Low roof load
- Efficient operation even during winter
- Easy and cost-efficient installation
- Fully autonomous system (even during power outage)
- Self-diagnostics
- Developed and produced in Czech Republic
- Patented technology
- Optional GSM based remote monitoring



APPLICATION AREAS

- Residential properties
- Sports facilities
- Wellness centers
- Holiday facilities
- Water parks
- Hotels, guest houses
- Restaurants

Innovative **energy saving** solutions



Technical data

| Electric data (one photovoltaic power module)* | |
|--|-----------------------------|
| Number of power modules | 3 pcs |
| Input open circuit voltage (limits) | 200 - 340 VDC |
| MPP tracking range | 185 - 320 VDC |
| Maximum utilizable current | 10 A |
| Maximum efficiency | 99 % |
| Typical installed power | ~2500 Wp per power module** |

* KERBEROS POWER can be equipped with 3 power modules

** Maximum and minimum input voltage limits must be strictly kept at any solar irradiance and temperature.

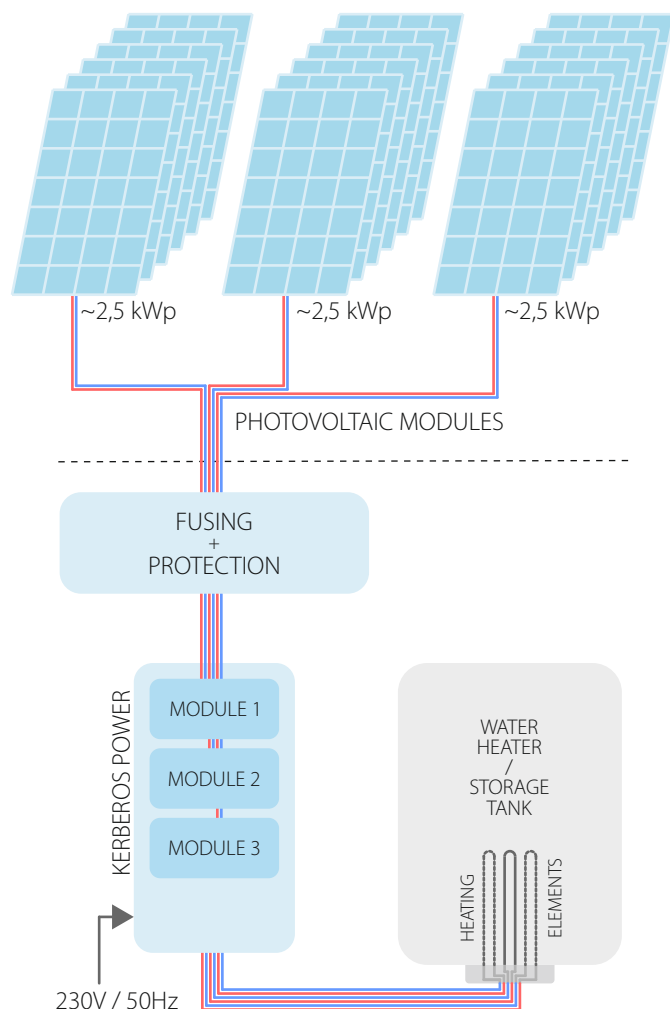
| Electric data - electricity mains | |
|-----------------------------------|---------------|
| Input voltage | 230 VAC 50 Hz |
| Power consumption | < 5 W |

| Heating elements | |
|--|------------|
| Number of heating elements or independent sections | 3 pcs |
| The performance of heater / section | 2 - 2,5 kW |
| The possibility of using a three-phase body with separate sections | YES |
| The possibility of using separate single phase heating elements | YES |
| The possibility of using a three phase body with a common center | NO |

| Thermal regulator | |
|-------------------|------------------|
| Setting range | 10 - 85°C |
| Thermal fuse | YES - electronic |

| Working conditions | |
|-----------------------------|--|
| Operating temperature | +5 to +40°C |
| Storage temperature | -10 to +40°C |
| Operating relative humidity | Max 75 % non condensing |
| Storage relative humidity | Max 90 % non condensing |
| Environmental dustiness | Dust particles volume max 0,75 mg/m ³ |
| Chemical influence | Non aggressive |

| Construction parameters | |
|---------------------------------------|--------------------|
| Measurements (height x width x depth) | 498 x 210 x 270 mm |
| Weight | 11,2 kg |
| Ingress protection | IP 20 |



Distribution:

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