

## PHOTOVOLTAIC WATER HEATING

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

KERBEROS POWER is a **high-performance** modular photovoltaic water heating system. It is designed for 2 or 4 or 6 kWp of installed photovoltaic power.

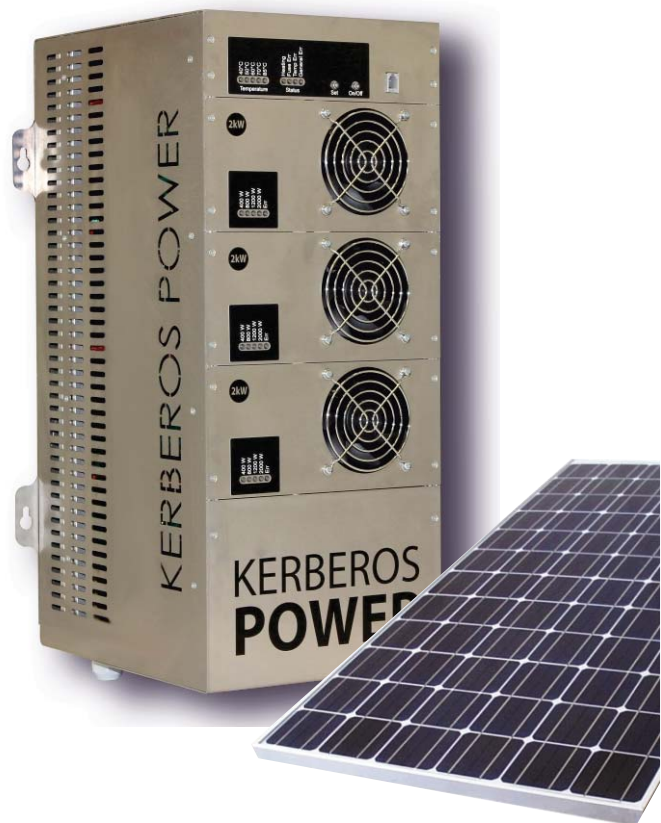
It operates with **standard heating elements** with an output of 2 - 2.5 kW for each of maximum 3 modules.

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 **island mode**, the photovoltaic section is **isolated from the grid**.

KERBEROS POWER enables **online remote control**.

## BENEFITS

- Even more savings thanks to innovative technology
- High efficiency
- Suitable for any type of hot water storage tank
- Low roof load
- Efficient operation also during winter
- Easy and cost-efficient installation
- Fully autonomous system (even during a power cut)
- Monitoring of energy produced
- Auto-diagnostics
- Developed and made in Czech Republic
- Patented technology



## APPLICATION AREAS

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

Innovative **energy saving** solutions



## Technical data

| Electric data of one photovoltaic power module* |               |
|---|---------------|
| Number of power modules                         | 1 - 3 pc      |
| Input open circuit voltage (limits)             | 200 - 340 VDC |
| MPP tracking range                              | 185 - 320 VDC |
| Maximum output current                          | 9 A           |
| Maximum efficiency                              | 99 %          |
| Typical wiring                                  | 8 x 260 Wp**  |

\* KERBEROS POWER can be equipped with 1, 2 or 3 power modules

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

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

| Heating elements   |            |
|--|------------|
| Number of heating elements or independent sections                 | 1 - 3 pc   |
| 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         |

| WiFi / Ethernet communication module (optional) |          |
|---|----------|
| Measurement period                              | 60 sec   |
| History of data recording                       | 365 days |

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

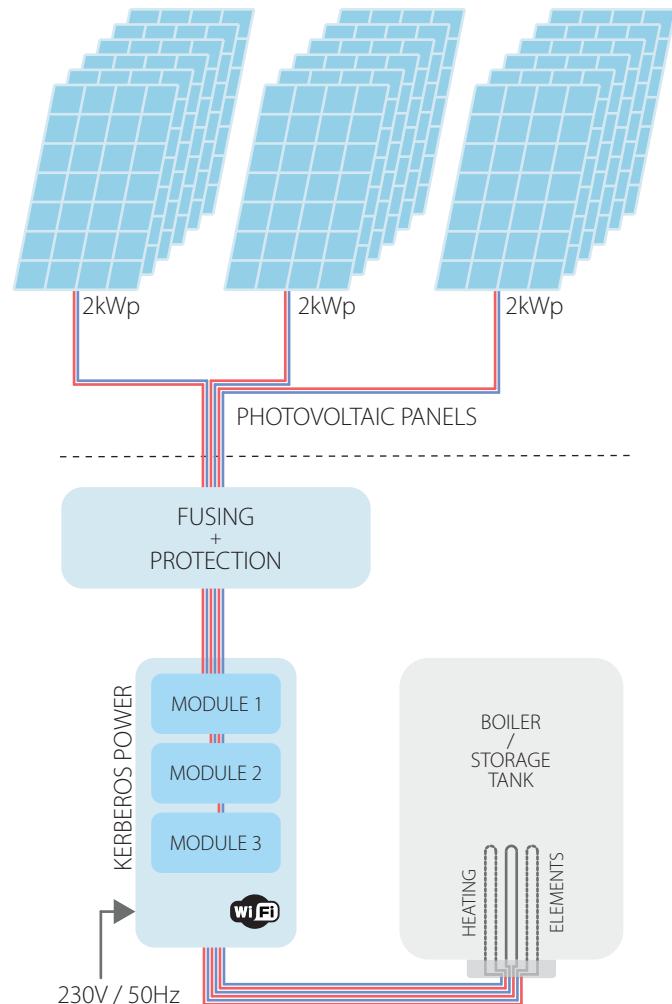
| Working conditions          |  |
|-----------------------------|--|
| Operating temperature       | +5 až +40°C                                      |
| Storage temperature         | -10 až +40°C                                     |
| Operating relative humidity | Max 75 % non condensing                          |
| Storage relative humidity   | Max 90 % non condensing                          |
| Environmental dustiness     | Dust particles volume max 0,75 mg/m <sup>3</sup> |
| 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              |

## Innovative energy saving solutions

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