

Power Supply Unit

AC-DC Power Adapter

PSU-12 | PSU-18 | PSU-24



The Power Supply Unit reheats the photovoltaic water heater in times of bad weather.



PLUG & PLAY

The Power Supply Unit is connected by simple plug and play connections. No electrician is needed.



SECURITY OF SUPPLY

Long periods of bad weather can be bridged with the unit, by reheating the water to a desired temperature.



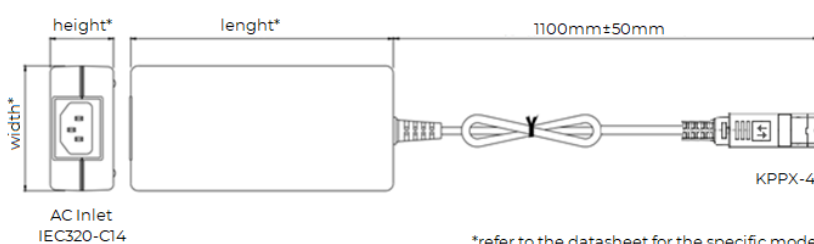
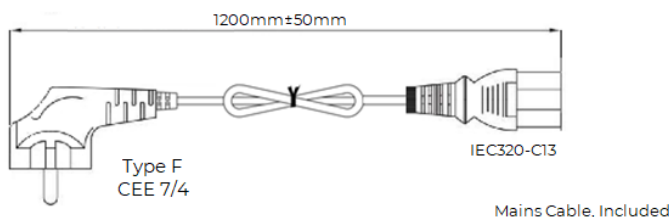
ADJUSTABLE TEMPERATURE

By setting the minimum temperature, you determine the balance between comfort and amount of directly used photovoltaic energy.



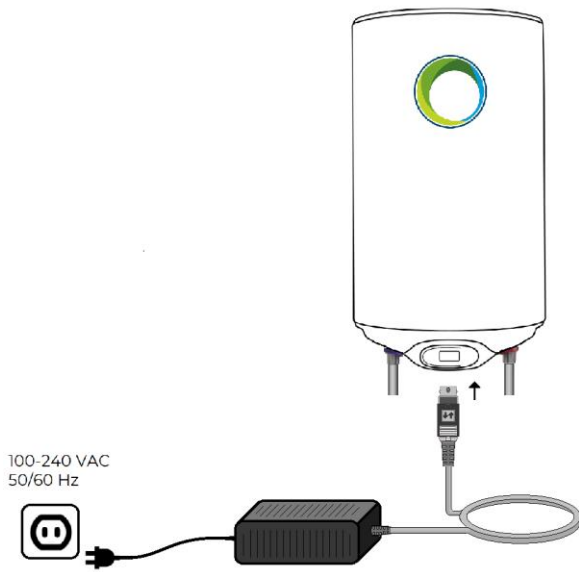
2 YEARS PRODUCT WARRANTY

Dimensions



| Specifications | unit | PSU-12 | PSU-18 | PSU-24 |
|---|-----------------|---|---|---|
| Input voltage range | V _{AC} | 100-240 | 100-240 | 100-240 |
| Input frequency range | Hz | 50-60 | 50-60 | 50-60 |
| Max. input current | A | 2.5 | 2.5 | 3.5 |
| AC inlet type | - | IEC320-C14 | IEC320-C14 | IEC320-C14 |
| Efficiency (Typ.) | % | ≥ 90 | ≥ 90 | ≥ 90 |
| Standby power consumption (Typ.) | mW | < 100 | < 150 | < 210 |
| Output DC voltage (Typ.) | V _{DC} | 12.0 | 18.0 | 24.0 |
| Max. rated current | A | 7.0 | 8.4 | 11.0 |
| Max. rated power | W | 84 | 151 | 264 |
| Heating power for photovoltaic water heater | W | 58 | 133 | 240 |
| Ambient temperature range | °C | -10-40 | -10-40 | -10-40 |
| Humidity range | % | 20-90 | 20-90 | 20-90 |
| IP Code | - | IP20 | IP20 | IP20 |
| Overload protection | - | yes | yes | yes |
| Overvoltage protection | - | yes | yes | yes |
| Short circuit protection | - | yes | yes | yes |
| Thermal protection | - | yes | yes | yes |
| Case | - | Plastic, fully enclosed | Plastic, fully enclosed | Plastic, fully enclosed |
| Dimensions (length, width, height) | cm | 13.0 x 5.8 x 3.1 | 16.8 x 6.8 x 3.1 | 17.7 x 8.0 x 3.1 |
| Weight | g | 460 | 660 | 800 |
| Certificates | - | UL/CUL, ETL, TUV-GS, CE, RCM, CCC, KC, PSE, FCC, ROHS | UL/CUL, ETL, TUV-GS, CE, RCM, CCC, KC, PSE, FCC, ROHS | UL/CUL, ETL, TUV-GS, CE, RCM, CCC, KC, PSE, FCC, ROHS |
| Safety standards | - | IEC62368, IEC61558 IEC61347, IEC60335 IEC60601 | IEC62368, IEC61558 IEC61347, IEC60335 IEC60601 | IEC62368, IEC61558 IEC61347, IEC60335 IEC60601 |

Installation



Connections



- 1 DC-Input
- 2 PV-Module (-)
- 3 PV-Module (+)
- 4 Hot water drainage
- 5 Cold water supply

Heating Duration

The following table shows the duration for heating up the different sizes of water heaters with the different power supply units, starting with a water temperature of 15°C and ending at 35°C.

| Power Supply Unit | Heating power | 10 l | 30 l | 80 l |
|-------------------|---------------|------------|-----------|-----------|
| PSU-12 | ~ 58 W | ~ 5.5°C/h | ~ 2.0°C/h | ~ 0.7°C/h |
| PSU-18 | ~ 133 W | ~ 12.0°C/h | ~ 4.0°C/h | ~ 1.5°C/h |
| PSU-24 | ~240 W | ~ 21.5°C/h | ~ 7.0°C/h | ~ 2.7°C/h |

Note: The values given in the table are intended as a guideline.