

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.

ADJUSTABLE TEMPERATURE

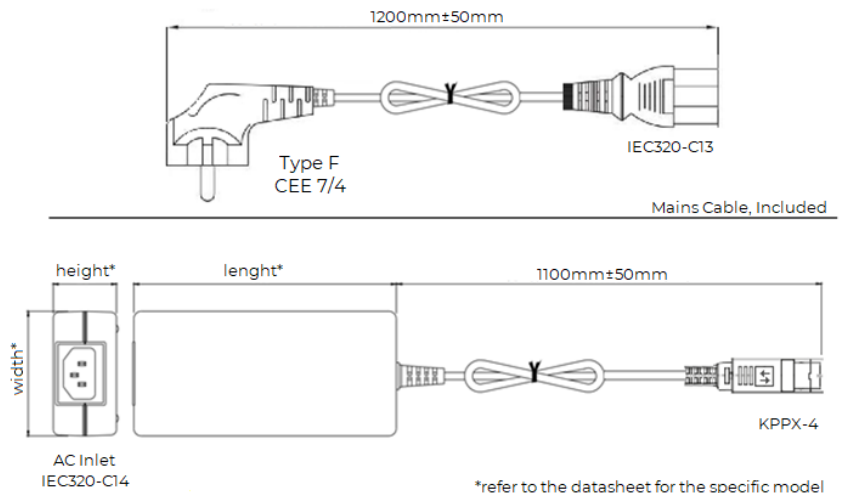
By setting the minimum temperature, you determine the balance between comfort and amount of directly used photovoltaic energy.

SECURITY OF SUPPLY

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

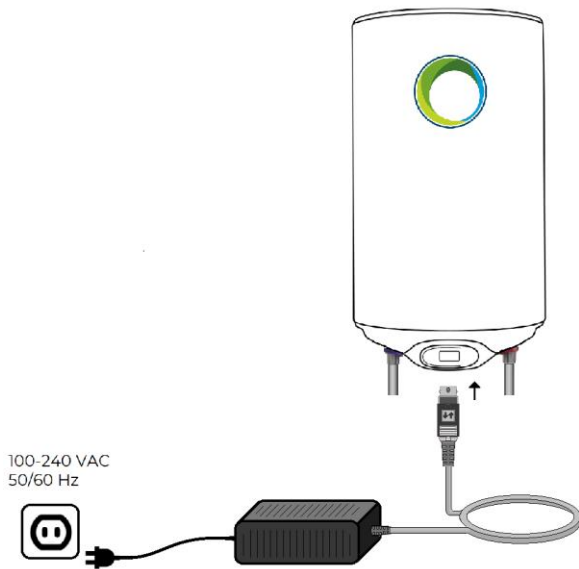
2 YEARS PRODUCT WARRANTY

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.