SG-PV DATASHEET

840 Wp · The retrofit solar package for SG tents

SEYBOLD PV-SYSTEME GmbH

1 · SG-PV 840 Wp retrofit cover · 2 solar modules

Retrofit cover: approx. 1.50 × 6 m, PVC-coated polyester fabric *(flame-retardant, B1 to DIN 4102-1)*[1]

Packed size: approx. 1.90 m × Ø 30 cm, weight approx. 7 kg.

Fits

- SG 30 / 300
- SG 40 / 400
- SG 50 / 500

2 · Solar modules

Module power	420–430 Wp · glass-free, semi-flexible
Technology / efficiency[2]	Back-contact cells · over 22%
MPP voltage[3]	35.18 V / 70.36 V (2 in series)
MPP current / short-circuit current[3]	12.23 A / 13.11 A
Module dimensions (L × W × H)[4]	1,850 × 1,160 × 24 mm
Weight incl. carry bag	approx. 10 kg per module
Connectors	Stäubli MC4-Evo 2 (MC4-compatible)
Module temperature range	−40 to +85 °C
Standards[1]	
IEC/EN IEC 61215-1/-1-1/-2:2021	Design qualification
IEC 61730-1, -2:2023	Safety
IEC 60068-2-68:1994 (mod.)	Sand / dust
IEC/EN IEC 61701:2020	Salt mist
IEC TS 62804-1:2015 (mod.)	PID
IEC/EN 62716:2013	Ammonia
DIN EN 13501-1:2019	Reaction to fire
DIN EN 13501-5:2016	External fire test · B_{ROOF}(t1)
2014/35/EU	CE / Low Voltage Directive

Open-circuit voltage Voc

Temperature	1 module	2 in series
+25 °C	42 V	**84 V**
0 °C	45 V	**89 V**
-20 °C	46 V	**92 V**

Temperatures refer to cell / module temperature.

[1] Classifications and tests according to manufacturer / system specifications apply to the stated components or tested assemblies, not automatically to the entire tent.

[2] Efficiency is based on the effective module area.

[3] Electrical specifications from the available 430 Wp manufacturer datasheet; conservative system rated power 840 Wp. STC: 1,000 W/m², AM 1.5, cell temperature 25 °C.

Voc values are temperature-dependent calculated values, not guaranteed maximum values. Voc temperature coefficient: −0.220%/°C; power: −0.240%/°C. Measurement specification ±3%, power tolerance 0/+5 W per module.

[4] Dimensions of the finished system module per system specifications. Dimensions and weights are approximate.

Use only approved connector pairings. For complete system operating temperatures, see page 2.

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3 · Battery storage

Storage option	2 kWh (29 kg)	4 kWh (52 kg)
Rated capacity	**2,304 Wh**	**4,096 Wh**
OUTPUTS		
230 V · continuous power	**2.4 kW** (5 s: 3.6 kW)	**4.0 kW** (0.4 s: 8.0 kW)
USB-C / USB-A	2 × 100 W / 2 × 18 W	2 × 100 W / 2 × 18 W
12 V DC	10 A	30 A total[1]
INPUTS		
PV input / MPPT	12–145 V · 15 A	30–150 V · 15 A (High)
230 V · mains / generator	max. 2,400 W	max. 2,900 W
AC charge time 0–80%[2]	approx. 60 min	approx. 60 min
DIMENSIONS AND OPERATION		
Dimensions approx. (L × W × H)	42 × 28 × 37 cm	69 × 34 × 41 cm
Weight approx.	29 kg	52 kg
Charging temperature	0 to +40 °C	0 to +45 °C
Discharging temperature	−20 to +40 °C	−10 to +45 °C
Cell chemistry	$LiFePO_4$	$LiFePO_4$

According to manufacturer specifications; dimensions, weights and class designations are rounded. AC power is total, USB power per port. [1] 12.6 V; Anderson max. 30 A, DC5521 max. 5 A. [2] Manufacturer guideline at maximum AC charging power; smaller storage unit at 25 °C in fast-charging mode. Generator output and voltage quality must be suitable.

4 · Operating temperature of the complete system

System with	Discharging	Charging
2 kWh storage	−20 to +40 °C	0 to +40 °C
4 kWh storage	−10 to +45 °C	0 to +45 °C

PV modules in the system down to −20 °C. Do not charge the storage unit below 0 °C. Install the storage unit in a dry, protected location.

5 · Shipping and storage

Euro pallet — Optional shipment on a Euro pallet with wire mesh collar for upright transport of solar modules (L × W × H: 120 × 80 × 220 cm). The loaded pallet is not stackable.

Large pallet — Footprint approx. 220 × 120 cm for horizontal transport of stacked solar modules (for example, from 6 PV modules).

6 · Scope of supply per cover

- 1 × retrofit cover
- 2 × PV modules in carry bags
- 4 × tie-down straps, 35 mm × 6 m each
- 4 × cotter pins
- 4 × screw-in pegs 10 × 300 mm + TX-50 bit
- 2 × assembly keys for Stäubli EVO2
- 2 × 3 m extension (4 mm² solar cable)

1 × retrofit cover	**7 kg**
2 × PV modules in carry bags	**10 kg each**
1 × accessories in bag	**≈ 2 kg**
Set weight without battery	**≈ 30 kg**