TECHNICAL SPECIFICATIONS

POWGROW SMS-6.5KP inverter 6.5kW 48V

Hybrid solar inverter 6.5 kW / 48 V with 120 A MPPT and Wi-Fi monitoring



Features

- MPPT solar controller 120 A
- Max. PV input current 27 A
- Works with a generator
- Lithium battery activation
- Wi-Fi monitoring
- Wide PV voltage range: 60–500 V
- Two AC outputs
- Lithium (with BMS) and lead-acid batteries
- Grid feed-in

Technical specifications

AC input	
Rated input voltage	**208 / 220 / 230 / 240 V; L + N + PE**
Voltage range	**90–280 V ±3 (normal mode); 170–280 V ±3 (UPS mode)**
Frequency	**50 / 60 Hz (auto-detect)**
AC output	
Rated power	**6.5 kW**
Peak power	**12 kVA**
Voltage	**208 / 220 / 230 / 240 V**
Power factor (PF)	**1**
Frequency	**50 / 60 Hz ±0.1 %**
Transfer time	**10 ms (normal mode) / 10 ms (UPS mode)**
Waveform	**Pure sine wave**
Overload capacity (on battery)	**1 min at 102–120 %; 10 s at >120 % load**
Max. efficiency (battery)	**94 % at 48 V DC**
Units in parallel	**≤ 9**

Charger (PV / AC)	
Solar controller type	**MPPT**
Max. PV input current / input power	**27 A / 9000 W**
MPPT operating range	**60–450 V DC**
Max. PV open-circuit voltage (Voc)	**500 V DC**
Max. PV charge current	**120 A**
Max. grid charge current	**120 A**
Max. charge current (PV + grid)	**120 A**
Battery	
Rated voltage	**48 V DC**
Battery type	**Lithium and lead-acid**
Interfaces	
User interface	**LCD display**
Comm. ports	**RS232 / RS485 / USB**
Monitoring	**Wi-Fi**
General data	
Protection rating	**IP21**
Operating temperature	**−10…+60 °C**
Relative humidity	**5–95 % (non-condensing)**
Storage temperature	**−15…+60 °C**
Net weight	**9.4 kg**
Dimensions (W×H×D)	**440 × 335 × 117 mm**
Max. operating altitude	**4000 m (derating above 1000 m)**

Manufacturer data for the SMS-6.5KP model. Check the label on the case before installation.

minertech.org · MinerTech® trademark · © 2017–2026, all rights reserved
+38 093 293 93 93 · +38 099 054 40 38 · Specialist Pavlo Leonidovych · strooks@gmail.com