



**NitroX<sup>®</sup>**  
**3KW-24V SP-HYBRID**  
**PV INVERTER WITH ENERGY STORAGE**



- |                                  |                                     |                                |
|----------------------------------|-------------------------------------|--------------------------------|
| <b>Max. Efficiency 97.6%</b>     | <b>IP65 Ingress Protection</b>      | <b>Smart MPPT</b>              |
| <b>Support Multiple Parallel</b> | <b>Support Generator Connection</b> | <b>Internal SPD</b>            |
| <b>Zero Export</b>               | <b>High Surge Endurance</b>         | <b>Six Time of Use Setting</b> |
| <b>RS485 / CAN</b>               | <b>High Power Factor</b>            | <b>Safe</b>                    |
| <b>Efficiency</b>                | <b>Touch Screen Display</b>         | <b>Dual Output</b>             |

**4000 WATTS**  
DUAL MPPT  
SUPPORTS UPTO 600 WATTS SOLAR PANEL

**140 AMP Solar Charger**

**Remote Monitoring Features**

- External light indicator, logging status at a glance.
- Plug & play, pick power within inverter, no external power needed, easy to install.
- IP65 water-proof design, resistant to bad weather, enhance stability.
- External design, easier to replace faulty equipment.
- End-user can monitor yields at any time with SOLARMAN APP.



Smart PV Monitoring Platform



Stick Logger



## Technical Data

Model	NITROX HYBRID 3 KW SP-24V
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Li-Ion
Battery Voltage Range (V)	20~30
Max. Charging Current (A)	140
Max. Discharging Current (A)	140
External Temperature Sensor	Optional
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
<b>PV String Input Data</b>	
Max. DC Input Power (W)	4000W
Rated PV Input Voltage (V)	370 (125~500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150-425
Full Load DC Voltage Range (V)	300-425
PV Input Current (A)	13A
Max. PV ISC (A)	17A
Number of MPPT / Strings per MPPT	1/1
<b>AC Output Data</b>	
Rated AC Output and UPS Power (W)	3000
Max. AC Output Power (W)	3300
AC Output Rated Current (A)	13.6/13A
Max. AC Current (A)	15/14.3A
Max. Continuous AC Passthrough (A)	35
Peak Power (off grid)	2 time of rated power, 10 S
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50/60Hz; 220V/187V-242V,230V/ 195.5V-253V
Grid Type	Single Phase
DC injection current (mA)	THD<3% (Linear load<1.5%)
<b>Efficiency</b>	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	>99%
Transfer time	4ms
<b>Protection</b>	
Integrated	PV Arc Fault Detection,PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection,Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection,Surge protection
<b>Certifications and Standards</b>	
Grid Regulation	EN50549,AS4777.2,VDE0126,IEC61727,VDEN4105,G99, NBT32004,CEIO-21,NRS097,NBR16149/16150,RD1699
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4
<b>General Data</b>	
Operating Temperature Range (°C)	-45~60°C, >45°C derating
Cooling	Smart cooling
Noise (dB)	<30 dB
Communication with BMS	RS485; CAN
Weight (kg)	11.4
Size (mm)	330W×559.5H×228D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years (T&C)

