



NitroX[®]

3KW-24V SP-HYBRID

PV INVERTER WITH ENERGY STORAGE

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

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



Solarman
Smart for
enduser



Solarman Business
for installers and EPC



Technical Data

Model	NITROX HYBRID 3 KW SP-24V
Battery Input Data	
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
PV String Input Data	
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
AC Output Data	
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%)
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	>99%
Transfer time	4ms
Protection	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
Integrated	
Certifications and Standards	
Grid Regulation	EN50549, AS4777.2, VDE0126, IEC61727, VDE04105, G99, NBT32004, CEI0-21, NRS097, NBR16149/16150, RD1699
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
General Data	
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)	330Wx559.5Hx228D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years (T&C)

