



NitroX[®]

12KW-48V 3P-HYBRID

PV INVERTER WITH ENERGY STORAGE

- | | | |
|-------------------------------|------------------------------|-------------------------------|
| Max. Efficiency 99% | IP65 Ingress Protection | Dual MPPT |
| Support Multiple Parallel | Support Generator Connection | Internal SPD |
| Zero Export | High Surge Endurance | Six Time of Use Setting |
| Dual 3Phase Output | RS485 / CAN | High Power Factor |
| Safe | Premium Efficiency | Colorful Touch Screen Display |
| High DC Voltage Range 140-800 | Three Phase Hybrid Operation | GRID FEEDING OPTION |

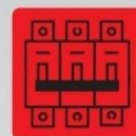
Remote Monitoring Features

- Compatible With Inverex Power Cube
- 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.



15600 WATTS

DUAL MPPT
SUPPORTS UPTO 600 WATTS
SOLAR PANEL



**BUILT-IN
AC BREAKER**



Smart PV Monitoring Platform



Stick Logger



Solarman
Smart For
enduser



Solarman Business
For installers
and EPC

Technical Data

Model	NITROX HYBRID 12 KW 3P-48V
Battery Input Data	
Battery Type	Lead-acid or Li-Ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	240
Max. Discharging Current (A)	240
External Temperature Sensor	yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
PV String Input Data	
Max. DC Input Power (W)	15600W
Rated PV Input Voltage (V)	550 (160~800)
Start-up Voltage (V)	160
MPPT Voltage Range (V)	200-650
PV Input Current (A)	26+13A
Max. PV ISC (A)	34+17A
Number of MPPT / Strings per MPPT	2/2+1
AC Output Data	
Rated AC Output and UPS Power (W)	12000
Max. AC Output Power (W)	13200
AC Output Rated Current (A)	18.2/17.4A
Max. AC Current (A)	27.3/26.1A
Max. Continuous AC Passthrough (A)	50
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; 380/400Vac (Three phase)
Grid Type	Three Phase
DC injection current (mA)	THD<3% (Linear load<1.5%)
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	>99%
Transfer time	4ms
Protection	
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
Certifications and Standards	
Grid Regulation	EN50549, AS4777.2, VDE0126, IEC61727, VDE N4105, 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)	≤45 dB(A)
Communication with BMS	RS485; CAN
Weight (kg)	33.6
Size (mm)	422W×699.3H×279D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years (T&C)