

# OFF-GRID SOLAR INVERTER

Low Frequency Off-Grid Solar Inverter

## NEOSUN PVL - 6kW | 8kW | 10kW | 12kW

### Features

- Rated power 6kw to 12kw (pure sine wave)
- Built-in MPPT Charge Controller 60A/120A with efficiency up to 98%
- Built-in pure copper UI transformer
- 12V/24V/48V – Selectable input voltage range
- DC start & Automatic Self-Diagnostic Function
- Smart LCD (Working modes, Charge Current, Charge voltage, etc.)
- RS485 monitoring function with free CD
- Supporting AGS, BTS port WIFI/GPRS remote monitoring (optional)
- Compatible to Diesel Generator

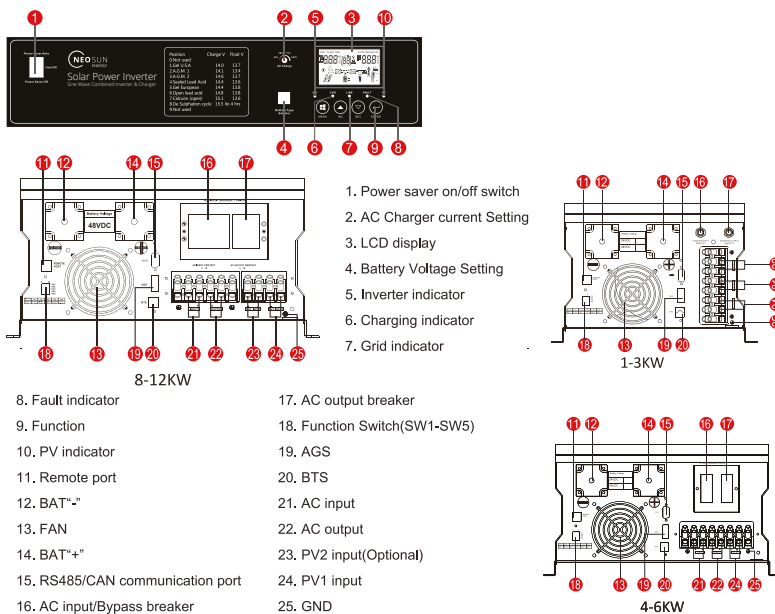


### Overview

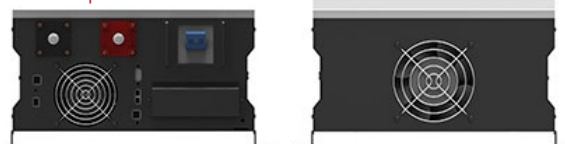
This high capacity Off-Grid Solar PV Inverter with its new attractive design and portable size is an excellent solution for a country house or small farm.

Useful LCD display offers user-configurable and easy-access button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

### LCD Display Information



### Back panel



### Solar system connection



Inverter Output	PVL-6K	PVL-8K	PVL-10K	PVL-12K
Default Battery Systeem Voltage (VDC)	48V			
Continuous output power	6.0kW	8.0kW	10.0kW	12.0kW
Surge rating (20ms)	18.0kW	24.0kW	30.0kW	36.0kW
Capable of starting electric motor	3HP	4HP	5HP	6HP
Output waveform	Pure sine wave/ same as input (bypass mode)			
Inverter efficiency (Peak)	>88%			
Line mode efficiency	>95%			
Power factor	0.8%			
Nominal output voltage RMS	220V/230V/240VAC (±10% RMS)			
Output frequency	50Hz/60Hz ±0.3 Hz			
Short circuit protection	Yes (1sec after fault)			
Typical transfer time	10ms (max)			
<b>Input (AC)</b>				
Voltage	230VAC			
Selectable Voltage Range	154~272VAC (For Personal Computers)			
Frequency Range	50Hz / 60Hz (Auto sensing)			
<b>Battery</b>				
Minimum start voltage	20.0VDC/21.0VDC for 24VDC mode (40.0VDC/42.0VDC for 48VDC mode)			
Low battery alarm	21.0VDC±0.3V for 24VDC mode (42.0VDC±0.6V for 48VDC mode)			
Low battery cutoff	20.0VDC±0.3V for 24VDC mode (40.0VDC±0.6V for 48VDC mode)			
High voltage alarm	32.0VDC±0.3V for 24VDC mode (64.0VDC±0.6V for 48VDC mode)			
High battery voltage recover	31.0VDC±0.3V for 24VDC mode (62.0VDC±0.6V for 48VDC mode)			
Idle Consumption-Search Mode	<25W when power saver on			
<b>AC Charger</b>				
Output Voltage	Depends on battery type			
Charger AC Input Breaker Rating	30A	40A	50A	63A
Overcharge Protection S.D.	31.4VDC for 24VDC mode(62.8VDC for 48VDC mode)			
Maximum Charge Current	65A/50A	70A	80A	100A
<b>BTS</b>				
Continuous Output Power	Yes Variances in charging voltage & S.D. voltage base on the battery temperature			
<b>Bypass &amp; Protection</b>				
Input Voltage Waveform	Sine wave (grid or generator)			
Nominal voltage	220V/230V/240VAC			
Max input AC voltage	300VAC for 230VAC HV mode			
Nominal input frequency	50Hz or 60Hz			
Overload Protection (SMPS Load)	Circuit breaker			
Output Short Circuit Protection	Circuit breaker			
Bypass Breaker Rating	40A	80A	80A	80A
Max Bypass Current	40Amp	80Amp	80Amp	80Amp
Rated voltage	24VDC/48VDC			
PV open circuit voltage	Operational max =145VDC temperature corrected VOC			
<b>Solar Charger</b>				
Maximum PV Charge Current	60A	60A (120A Optional)		
DC Voltage	24V/48V (auto)	48V		
Maximum PV Array Power	3200W	3200W (6400W for 120A Optional)		
MPPT Range @ Operating Voltage (VDC)	64-145VDC			
Maximum PV Array Open Circuit Voltage	147VDC			
Maximum Efficiency	>98%			
Standby Power Consumption	<2W			
<b>Mechanical Specification</b>				
Mounting	Wall mount			
Net / Shipping Dimensions (WxHxD)	670x410x215mm / 884x618x443mm			
Net / Shipping Weight	44kg / 64kg	69+2.5kg / 89+2.5kg	75.8+2.5kg / 95.5+2.5kg	
<b>Other</b>				
Operation Temperature Range	0°C to 40°C			
Storage Temperature	-15°C to 60°C			
Display	LED+LCD			
Loading (20GP/40GP/40HQ)	140pcs/280pcs/320pcs			