

# Low Frequency Solar Inverter

## NG3500 PRO Series (4KW-12KW)



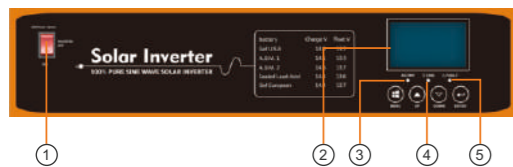
### Features

- Smart LCD setting(Working modes, Charge Current, Charge voltage, etc.)
- Built-in MPPT solar charge controller 80A/100A/200A
- MPPT efficiency max 98%
- Powerful charge rate up to 140Amp
- DC start & Automatic Self-Diagnostic Function
- WIFI / USB monitoring function (wi-fi optional)
- Supporting AGS, BTS port
- Compatible to generator

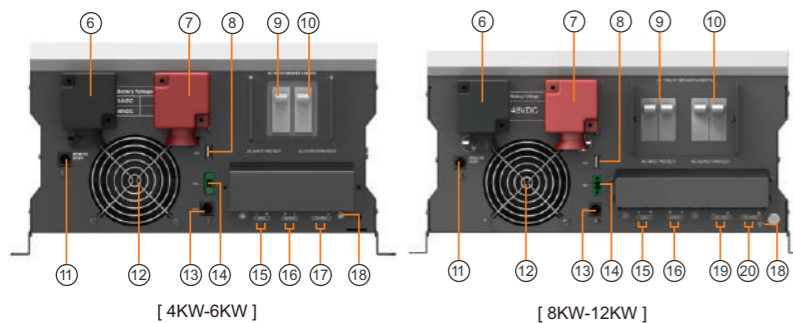
### Introduction

NG3500 PRO series is a multi-function inverter ,combining functions of inverter and MPPT solar charger controller, solar charger and battery charger to offer uninterruptible power support. The comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and selectable input voltage based on different applications.

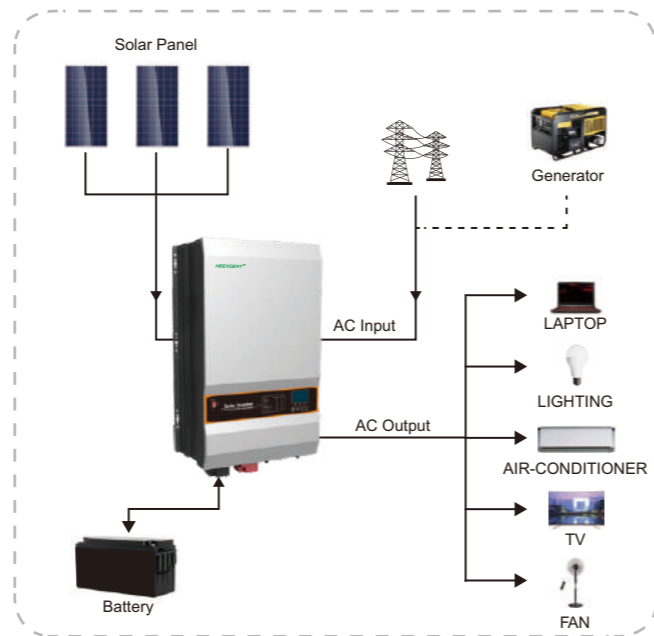
### Back panel printing description



- |                                |                          |
|--------------------------------|--------------------------|
| 1. Switch ON/OFF               | 11. Remote control port  |
| 2. LCD display                 | 12. Fan                  |
| 3. AC/Inverter indicator       | 13. BTS                  |
| 4. Charging indicator          | 14. AGS                  |
| 5. Fault indicator             | 15. AC input             |
| 6. BAT-                        | 16. AC output            |
| 7. BAT+                        | 17. PV input             |
| 8. WIFI/USB communication port | 18. Ground               |
| 9. AC input/Bypass breaker     | 19. PV2 input (optional) |
| 10. AC output breaker          | 20. PV1 input            |



### Solar system connection



### Specification

MODEL	NG35 PRO-4K		NG35 PRO-5K		NG35 PRO-6K	NG35 PRO-8K	NG35 PRO-10K	NG35 PRO-12K	
	24V	48V	24V	48V	48V	48VDC	48VDC	48VDC	
Nominal Battery System Voltage		24V	48V	24V	48V	48V	48VDC	48VDC	48VDC
INVERTER OUTPUT	Rated power	4KW		5KW		6KW	8.0KW	10.0KW	12.0KW
	Surge rating	12000VA		15000VA		18000VA	24000VA	30000VA	36000VA
	Capable of starting electric motor	2HP		2HP		3HP	4HP	5HP	6HP
	Waveform	Pure sine wave \ same as input (bypass mode)							
	Nominal output voltage RMS	220V \ 230V \ 240VAC (±10%RMS)							
	Output frequency	50Hz \ 60Hz ± 0.3Hz							
	Inverter efficiency(peak)	>85%				>88%			
	Line mode efficiency	>95%							
	Power factor	1.0							
	Typical transfer time	20ms(max)							
AC INPUT	Voltage	230VAC							
	Selectable voltage range	90-280 VAC (APL)							
	Frequency range	50Hz \ 60Hz							
BATTERY	Low battery voltage cutoff	20-24VDC for 24VDC mode (40-48VDC for 48VDC mode)							
	Low battery voltage recover	21-25VDC for 24VDC mode (42-50VDC for 48VDC mode)							
	High battery voltage cutoff	30VDC for 24VDC mode (60VDC for 48VDC mode)							
	High battery voltage recover	28.5VDC for 24VDC mode (57VDC for 48VDC mode)							
	Idle consumption-search mode	<30W when power saver on				<80W when power saver on			
AC CHARGER	Output voltage	Depends on battery type							
	Charger AC input breaker rating	40A	40A	50A	80A	80A	80A	80A	80A
	Overcharge protection S.D.	31.4VDC for 24VDC mode (62.8VDC for 48VDC mode )							
	Maximum charge current	80A	60A	100A	70A	80A	100A	120A	140A
BTS	Continuous output power	Yes Variances in charging voltage & S.D. voltage base on the battery temperature							
BYPASS & PROTECTION	Input voltage waveform	Sine wave (grid or generator)							
	Nominal input frequency	50Hz or 60Hz							
	Overload protection (SMPS Load)	Circuit breaker							
	Output short circuit protection	Circuit breaker							
SOLAR CHARGER	Bypass breaker rating	40A				63A			
	Max bypass current	40Amp				80Amp			
	Maximum PV charge current	80A				100A(200A optional)			
	DC voltage	24V \ 48V Auto work						48V	
	Maximim PV array power	2000W	4000W	2000W	4000W	4000W	5000W(10000W for 200A optional)		
	MPPT range @ operating voltage(VDC)	32-145VDC for 24V mode,64-145V for 48V mode						64-145VDC	
	Maximum PV array open circuit voltage	145VDC							
	Maximum efficiency	>98%							
Standby power consumption	<2W								
MECHANICAL SPECIFICATIONS	Mounting	Wall mount							
	Dimensions (W*H*D)	620*385*215mm				670*410*215mm			
	Net weight (solar CHG) (kg)	36	41	41	69+2.5	75.75+2.5	75.75+2.5		
	Shipping dimensions (W*H*D)	755*515*455mm				884*618*443mm			
	Shipping weight (Solar CHG) (kg)	56	61	64	82.5+2.5	89+2.5	92+2.5		
OTHER	Operation temperature range	0°C to 40°C							
	Storage temperature	-15°C to 60°C							
	Audible noise	60dB MAX							
	Display	LED+LCD							
	Loading (20GP/40GP/40HQ)	140pcs \ 280pcs \ 320pcs							