

OPTIMUM SERIES 3-6kW ON-GRID SOLAR INVERTER



A single-phase on-grid solar inverter is a part of photovoltaic (PV) power system that is connected to the electrical grid and supplies power to a single-phase electrical system. These systems are commonly used in residential and small commercial applications.



GENERAL FEATURES

- High Frequency On Grid Solar Inverter
- MPPT efficiency up to 99.50%
- Fanless low-noise design
- IP66 water-proof and dust-proof
- DSP digital control
- Wide grid voltage range
- Multiple communications

SPECIFICATIONS

MODEL	NPS-031PGT	NPS-041PGT	NPS-051PGT	NPS-061PGT	
PV Input (DC)	Rated power (kW)	3kW	4.2kW	5kW	6kW
	Maximum recommended DC power	3900W	5460W	6500W	7800W
	Nominal DC operating voltage	360V			
	Maximum DC voltage	550V			
	Start voltage	50V			
	MPPT voltage range	40~550V			
	Maximum input current	16A/16A			
	No. of MPP Tracker/string per MPP Tracker	2/1			
Grid Output (AC)	Nominal AC output power	3000W	4200W	5000W	6000W
	Max. Ac output power	3000VA	4200VA	5000VA	6000VA
	AC grid frequency	50/60Hz ±5Hz			
	Maximum output current	13.6A	13.6A	22.7A	27.2A
	AC nominal voltage	220V/230V/240V			
	AC voltage range	180~280V			
	Total harmonic distortion (THDi)	<3%			
	Rate power factor	1			
	Power factor adjustable range	0.8leading~0.8lagging			
	AC grid connection type	L+N+PE			
Efficiency	Maximum efficiency	98%	98.10%	98.20%	98.20%
	Euro-efficiency	96.80%	97%	97.20%	97.20%
	MPPT efficiency	99.50%			
	Self-consumption night	<1W			
Protection devices	Output over current protection	Yes			
	Output AC overvoltage protection	Yes			
	DC reverse polarity protection	Yes			
	DC switch	Yes			
	Ground fault monitoring	Yes			
	Integrated all pole-sensitive leakage current monitoring unit	Yes			
Physical	Machine dimension (W*H*D)	402*378*195			
	G.W	11kg			
Interface	DC connection	H4/MC4			
	Ac connection	Connector			
	Display	LED			
	Communication interface	Wifi/RS485/GPRS(opt)			

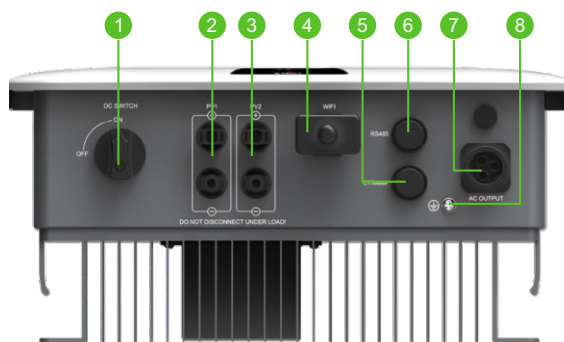
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Environment	Ingress protection rating	IP66
	Humidity	0-100%
	Operating temperature range	-25°C ~+60°C With derating above 45°C
	Cooling concept	Natural
	Noise emission (dB)	<35dB
	Topology	Transformerless
	Altitude	4000M

*Product specifications are subject to change without further notice.

BACK PANEL DESCRIPTION



- ① DC switch
- ② PV1 input
- ③ PV2 input
- ④ WIFI connector
- ⑤ CT/Meter port
- ⑥ RS-485 connector
- ⑦ AC output
- ⑧ Ground

ORDERING INFORMATION

Part Number	Description
NPS-031PGT	3kW On-Grid Solar inverter
NPS-041PGT	4.2kW On-Grid Solar inverter
NPS-051PGT	5kW On-Grid Solar inverter
NPS-061PGT	6kW On-Grid Solar inverter