

# Powernest PNA-6/8/10-02-US Split-phase inverter



## Safe and reliable

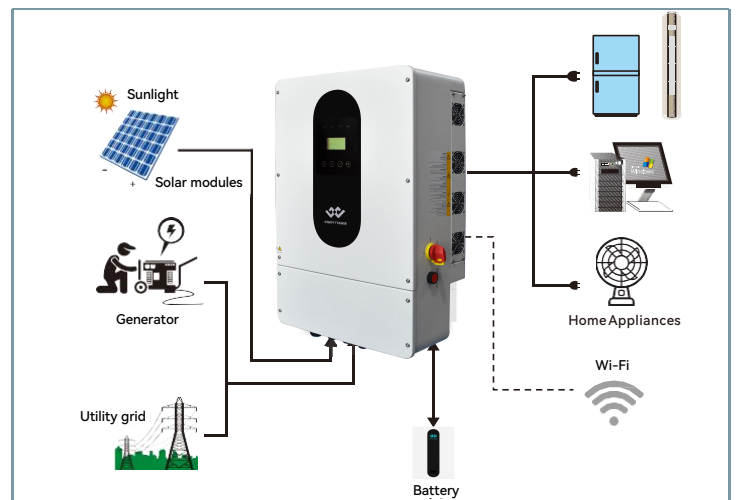
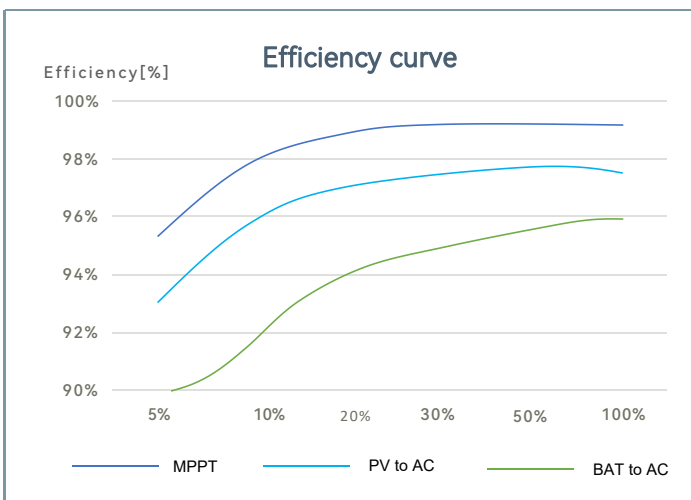
- Passed UL 1741:2021, IEEE 1547.1, UL1699B, South Africa NRS097-2-1:2017 test certification

## Friendly and flexible

- Support multi-machine parallel connection,
- Support multi-machine parallel mode sharing a battery pack, Single-machine load capacity 100A

## Economical and efficient

- Support parallel SOC equalization control and parallel current sharing control
- Using split-phase topology and eliminating the transformers, to make the system efficiency higher
- Support the diesel generator and the grid access at the same time



# Powernest PNA-6/8/10-02-US

## Split-phase inverter



Technical Specification	PNH-6-02-US	PNH-8-02-US	PNH-10-02-US
<b>Input (PV)</b>			
Max. power	9 kW	12 kW	13 kW
Max. DC voltage <sup>1</sup>	500 V		
MPPT voltage range <sup>2</sup>	120 V - 500 V		
Max.input current of single MPPT	12 A		
MPPT tracker/strings	4/1		
<b>output (AC)</b>			
Rated output power	6 kVA	8 kVA	10 kVA
Max. output current	28.8 A	38.3 A	47.8 A
Phase outputs	120/240(split phase), 208(2/3 phase),230 (single phase)		
Frequency	50 Hz / 60 Hz		
Power factor	0.8lagging-0.8leading		
THDi	< 3%		
AC output topology	Split phase, 2/3 phase, single phase		
<b>Battery</b>			
Battery voltage range	40 V ~ 60 V		
Max. charging voltage	58 V		
Max. charge/discharge current	135 A / 135 A	190 A / 190 A	210 A / 210 A
Communication interface	CAN2.0 / RS485		
<b>output (EPS)</b>			
Rated power	6 kVA	8 kVA	10 kVA
Rated output voltage	120 V / 240 V(split phase), 208 V(2/3 phase),230V (single phase)		
Rated output current	28.8 A	38.8 A	47.8 A
Rated frequency	50 Hz / 60 Hz		
Automatic switching time	< 20 ms		
THDu	< 2%		
Overload capacity	125%, 60S / 150%,1S		
<b>General data</b>			
Max. efficiency	≥98.2%		
North american efficiency	≥97.2%		
Ingress protection	IP65 / NEMA 3R		
Noise emission	<29 dB		
Operation temperature	- 25°C ~ 60°C(-13°F ~ 140°F)		
Cooling	Natural Convection		
Operation temperature	0 ~95% (non-condensing)		
Altitude	≤2000 m(≤6561 ft.)		
Safety standard	UL1741SA all options, UL1699B, CSA 22.2		
EMC	FCC Part 15, Class B		
On-grid	IEEE 1547, IEEE 2030.5, Hawaii Rule 14H, Rule 21 Phase I,II,III, NRS		
Dimensions (W x H x D)	430 x 710 x 220 mm (16.9 x 28.0 x 8.6 in)		
Weight	41 kg (90.4 lb)		
<b>Display and communication</b>			
Display	LCD, APP		
Communication interface	RS485/Wifi/4G/CAN2.0/DRM		

\*1 The maximum input voltage is the upper DC voltage limit of the inverter. Any higher input DC voltage may damage the inverter.  
 \*2 Any DC input voltage outside the operating voltage range of the inverter may cause the inverter to operate abnormally