



### High Cycle Life

6500 cycles, over 15 years of service life  
Module-level charge/discharge optimization



### Highly Efficient

Device side and cloud integrated BMS intelligent algorithm, optimize charging and discharging strategy, support deep discharge, release more power



### High Safety and Reliability

Automotive grade lithium iron phosphate (LFP) cells  
Vehicle-grade BMS, multiple battery safety protection



### Convenient Installation

Ultra-thin Wall mount design, easy to install



### Smart and Controllable

Smart APP to grasp real-time power information  
All kinds of status information at a glance




### Highly Compatible

Compatible with various brands of inverters for household use

# Powernest PNA-5-01 Specification

## Smart all in one ESS

| Technical Specification  |   |
|--|---|
| PNA-5-01   |   |
|  |   |
| <b>Input (Battery)</b>   |   |
| Battery chemistry  | LiFePO4   |
| Cycle life(25±2°C,0.5C/0.5C,80%DOD)  | ≥6500   |
| Nominal voltage  | 51.2 V  |
| Capacity   | 100 Ah  |
| Max. continuous charge/discharge current   | 1 C   |
| Working temperature  | Charge: 0°C ~ + 55°C (32°F ~ 131°F)<br>Discharge: -20°C ~ + 55°C (32°F ~ 131°F) |
| <b>Input (PV)</b>  |   |
| Max. DC power  | 6500 W  |
| Max. DC input voltage <sup>1</sup>   | 500 V   |
| MPPT voltage range <sup>2</sup>  | 120 V ~ 450 V   |
| Start voltage  | 116 V   |
| Nominal input voltage  | 360 V   |
| Max. MPPT input current  | 14 A  |
| Number of MPPT   | 1   |
| <b>Output (AC)</b>   |   |
| Nominal apparent power   | 5500 W  |
| Max. output current  | 23.9 A  |
| Nominal output voltage   | 230 Vac   |
| Output voltage range   | 184 Vac - 265 Vac   |
| Output voltage frequency   | 47.5 Hz ~ 51.5 Hz / 59.3 Hz ~ 60.5 Hz   |
| Power factor   | 0.8leading - 0.8lagging   |
| <b>Input (AC)</b>  |   |
| Nominal Input apparent power   | 5500 VA   |
| AC start voltage   | 120 Vac -140 Vac  |
| Voltage frequency  | 50 Hz / 60 Hz   |
| Max. input current   | 40 A  |
| Power factor   | 0.8 Overrun ... 0.8 lagging   |
| <b>Monitoring &amp; Control Platform</b>   |   |
| Human-Machine interaction  | APP/LCD   |
| Firmware update mode   | FOTA/local update   |
| Operation and maintenance model  | Remote O&M / Local O&M  |
| <b>General Parameters</b>  |   |
| Working temperature  | -20°C ~ +55 °C(32°F ~ 131°F)  |
| Operating humidity   | 0 %RH ~ 100 %RH   |
| Max. operating altitude  | 4,000 m (13,123ft.) (Derating above 2,000 m)                                    |
| Cooling mode   | Forced air cooling  |
| BMS communication mode   | RS485 / CAN2.0  |
| Weight <sup>3</sup>  | 75 kg(165.3 lb)   |
| Dimension (W x H x D)  | 690 x 810 x 171 mm (27.2 x 31.9 x 6.7 in)                                       |
| Self-consumption of electricity at night   | ≤4 W  |
| IP rating of enclosure   | IP54  |
| Max. efficiency  | 97%   |
| Installation method  | Wall mount / Floor stand  |
| Warranty   | 10 years (free), 15 years (paid)  |
| <b>Standard Compliance</b>   |   |
| Certification  | CE, UL, NSR, UN38.3, MSDS   |

\*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.

\*3 The weight of the battery module is subject to the actual product, with a tolerance of ±3%.