



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 PNE-5-02 Specification

Smart wall mount ESS



Performance

Battery chemistry	LiFePO4	
Cycle Life(25±2°C,0.5C/0.5C,80%DOD)	≥6500	
Nominal voltage	51.2 V	
Capacity	100 Ah	
Battery configuration	16S1P	
Energy	5.12 kWh	
Charge/Discharge current	Recommend	50 A
	Max.	100 A
	Peak(2mins,25°C)	120 A
Max. output power	5.1 kW	
Max. support parallel connection	15 pcs	
Operating voltage	41.6 V – 58.4 V	

Communication

Master LED Indicator	Y
Communication Port	RS485 / CAN2.0

General Specification

Dimension (W x H x D)	490 x 610 x 161 mm (19.3 x 24.0 x 6.3 in)
Weight ¹	50.5 kg (111.3 lb)
Recommend Depth of Discharge	90%
Installation	Wallmounted
Working Temperature	Charge: -10°C ~ +55°C (14°F ~ 131°F) Discharge: -20°C ~ +60°C (-4°F ~ 140°F)
Storage Temperature	0°C ~ +35°C (32°F ~ 95°F)
Max. operating altitude	2000 m (6561 ft.)
Installation Environment	Indoor3(*Pleaserefertotheusermanualforinstallationconditions)
Humidity	5% RH ~ 95%RH
Cooling mode	Natural Convection
IP Rating of Enclosur	IP 65
Warranty	10 years (free) , 15 years (paid)

Certification

Certificates	UN38.3, UL1973, UL9540A, CE, RCM, MSDS
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*1 The weight of the battery module is subject to the actual product, with a tolerance of ±3%.

*2 Energy storage system installation is related to product warranty, safe and stable operation, please follow the user manual requirements for standard installation, use and routine maintenance.